

CLERK'S COPY.

WALL

RECEIVED OF RECORD

1232
32

Supreme Court of the United States

OFFICIAL TERM, 1933

No. 27

THE TENNESSEE ELECTRIC POWER COMPANY,
ET AL, APPELLANTS, .

vs.

TENNESSEE VALLEY AUTHORITY, ARTHUR E.
MORGAN, HARCOURT A. MORGAN AND DAVID
E. LILIENTHAL

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF TENNESSEE

FILED APRIL 15, 1933.

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1938

No. 27

THE TENNESSEE ELECTRIC POWER COMPANY,
ET AL., APPELLANTS,

vs.

TENNESSEE VALLEY AUTHORITY, ARTHUR E.
MORGAN, HARCOURT A. MORGAN AND DAVID
E. LILIENTHAL

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF TENNESSEE

VOLUME I.

INDEX

	Original	Print
Record from D. C. U. S., Eastern District of Tennessee.....	1	1
Bill of complaint in Chancery Court of Knox County, Tennessee	1	1
Exhibit "A"—Map showing service areas of various companies, etc.	81	72
Exhibit "B"—Map showing dams and transmission lines acquired, constructed, or under construction by TVA	82	72
Exhibit "C"—"Representative public announcements and releases re national power policy".....	83	73
Exhibit "D"—"Representative public announcements and releases by TVA".....	97	86
Exhibit "E"—"Typical state statutes sponsored by defendants"	145	132

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

	Original	Print
Order of Chancery Court removing cause to D. C. U. S., Eastern Tennessee	149	136
Clerk's certificate..... (omitted in printing)...	149	
Certificate of disqualification of George C. Taylor, District Judge, and designation of Judge John J. Gore...	150	136
Amendment to bill of complaint.....	152	137
Defendants' motion to quash service of subpoena and dismiss bill of complaint for lack of jurisdiction.....	154	139
Memorandum opinion, Gore, J., overruling motion to quash service of subpoena and dismiss bill of complaint	156	141
Decree overruling motion to quash service of subpoena and dismiss bill of complaint.....	160	155
Defendants' motion to dismiss bill of complaint.....	170	156
Memorandum opinion, Gore, J., overruling motion to dismiss	172	158
Decree overruling motion to dismiss.....	174	159
Answer to bill of complaint.....	175	160
Recital as to exhibits to answer.....	306	259
Memorandum opinion, Gore, J., on application for temporary injunction	307	260
Order filed January 19, 1937, fixing time for taking depositions	309	262
Order filed March 19, 1937, fixing time for taking depositions	310	263
Defendants' motion to strike portions of bill of complaint	311	263
Defendant's motion for bill of particulars.....	312	264
Opinion, Simons, J., U. S. C. C. A., Sixth Circuit, on appeal from granting of interlocutory injunction.....	314	267
Concurring opinion, Allen, J.....	314-17	283
Opinion, Moorman, J., dissenting in part.....	314-19	284
Order dissolving preliminary injunction.....	315	285
Order on Defendants' motion to strike portions of bill of complaint	316	285
Order appointing Hal H. Clements, Jr., special master..	317	286
Order on defendants' motion for bill of particulars.....	320	288
Bill of particulars.....	321	289
Stipulation re authenticity of and exchange of certain documents	350	317
Suggestion that Act of Congress of August 24, 1937, requires application to senior or presiding circuit judge for designation of two additional judges to hear cause.	337	325
Amendment to stipulation re authenticity of and exchange of certain documents	358	327
Motion to compel defendants to produce documents and permit inspection thereof.....	359	327
Exhibit "A"—List of records of TVA.....	360	328
Exhibit "B"—Affidavit of Charles M. Seymour.....	372	341

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

	Original	Print
Motion filed September 20, 1937 for leave to take deposition of Harold L. Ickes.....	375	343
Recital as to Exhibit "A".....	376	343
Exhibit "B"—Affidavit of Raymond T. Jackson....	377	344
Application of complainants for an order requiring defendants to produce documents, or, in the alternative, for extension of time for taking testimony before special master	387	351
Orders designating judges to try case.....	396	357
Affidavit of James Lawrence Fly.....	397	358
Order permitting complainants to amend motion to compel defendants to produce certain documents and permit inspection thereof.....	402	363
Order permitting complainants to amend motion to take the deposition of Harold L. Ickes.....	408	364
Exhibit "C"—Proposed stipulation re testimony.....	404	364
Memorandum decision overruling complainants' motion for leave to take the deposition of Harold L. Ickes, overruling complainants' motion for an order requiring defendants to produce documents, or, in the alternative, for an extension of time for taking testimony before the special master and overruling complainants' motion to compel defendants to produce documents and permit inspection thereof.....	412	374
Order overruling and denying complainants' motion for leave to take the deposition of Harold L. Ickes.....	413	375
Order overruling and denying complainants' motion to compel defendants to produce documents and permit inspection thereof	414	376
Order overruling and denying application of complainants for an order requiring defendants to produce documents, etc.	415	376
Supplement to bill of particulars.....	416	377
Memorandum opinion on complainants' motion to require defendants to produce documents and permit the inspection thereof, complainants' motion for an order requiring defendants to produce documents, etc. and complainants' motion for leave to take the deposition of Harold L. Ickes.....	418	379
Petition for rehearing motion to take the deposition of Harold L. Ickes filed November 12, 1937.....	422	382
Motion filed December 6, 1937 for leave to take deposition of Harold L. Ickes	428	385
Motion on behalf of the complainants to strike and disregard briefs filed by the defendants on January 17, 1938	441	396
Complainants' suggested findings of fact.....	443	396
Defendants' suggested findings of fact and conclusions of law.....	564	477
Opinion of the court, Allen, J.....	654	542
Order overruling complainants' motion to strike and disregard briefs filed by defendants on January 17, 1938	663	565

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Evidence for complainants—Continued.

Deposition of—Continued.	Original	Print
R. H. Bandy	668	1356
Mrs. Nellie Armington.....	670	1357
Chester Gause	672	1359
Quincy L. Caughman.....	674	1360
R. C. A. Kittridge.....	675	1361
Testimony of Wm. Kelly.....	677	1362
L. E. Willson	710	1391
J. F. Burleson.....	715	1395
John A. Dunlap	717	1398
Gary M. Freeman.....	720	1400
Kenneth Markwell.....	728	1410
L. R. Lefferson.....	729	1411
Frank A. Newton.....	736	1417
Harry M. Addinsell.....	745	1425
Barney E. Eaton.....	752	1434
Request for subpoena duces tecum.....	755	1437
Testimony of Homer T. Harle.....	757	1439
Charles C. McWhorter.....	760	1441
L. W. Gentry.....	761	1442
Roy A. Smith	762	1443
Edward L. Moreland.....	766	1447
Wendell L. Willkie.....	830	1502
F. C. Weiss.....	835	1507
Stipulation re statement by Mr. Lillenthal.....	843	1514
Requests for subpoenas duces tecum.....	850	1528
Rulings of court on certain evidence, etc.....	863	1531
Evidence for defendants.....	891	1534
Testimony of Lewis H. Watkins.....	891	1534

VOLUME III.

Testimony of George R. Clemens	1008	1624
Edward H. Sargent.....	1053	1673
James S. Bowman.....	1074	1690
Sherman M. Woodward.....	1167	1772
Joseph H. Kimball.....	1229	1822
O. N. Floyd.....	1306	1887
Charles W. Okey.....	1328	1902
C. T. Barker.....	1373	1940
James S. Brodie.....	1471	2021
J. H. Alldredge	1493	2039
Percy H. Thomas.....	1549	2084
Kenneth E. Hapgood.....	1612	2135
G. O. Wessenauer....	1654	2170
Charles L. Karr.....	1681	2192
James S. Bowman (recalled)....	1732	2233
Deposition of R. D. Cowley.....	1760-a	2257
K. T. Hutchison.....	1760-o	2269

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
42—List of generating plants of Carolina Power & Light Company with the installed capacity of each.....	2020	2510
43—License granted by Federal Power Commission to Carolina Power & Light Company for Waterville project.....	2021	2510
44—Amendment of license granted by Federal Power Commission to Carolina Power & Light Company for Waterville project..	2035	2527
45—Map showing transmission and rural distribution system of Carolina Power & Light Company in the zones 100, 150 and 250 miles from Fontana Dam (original exhibit) [omitted]	2043	2534
46—Tabulation showing the total kwh. sales of the Carolina Power & Light Company for the years 1933 and 1936, the total sales to regular customers, and the sales to industrial customers in the areas within 100, 150 and 250 miles of Fontana Dam site for the years 1933 and 1936..	2044	2535
47—Statistical exhibit showing the development of the Carolina Power & Light Company from the year 1927 to July 31, 1937	2045	2536
48—Tax exhibit of Carolina Power & Light Company	2046	2537
49—Map showing the facilities and territory served by Appalachian Electric Power Company, the Kentucky & West Virginia Power Company, Inc., and the Kingsport Utilities, Inc. (original exhibit) [omitted]	2047	2538
50—List of generating plants of Appalachian Electric Power Company, with installed capacity of each	2048	2538
51—List of generating plants of Kentucky & West Virginia Power Company, Inc., with installed capacity of each.....	2049	2538
52—List of generating plants of Kingsport Utilities, Inc., with installed capacity of each	2050	2538
53—Summary of combined installed generating plant capacity of Appalachian Electric Power Company, Kentucky & West Virginia Power Company, Inc., and Kingsport Utilities, Inc.	2051	2538

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
54—Chart showing the development of the interconnection and coordination of the properties of Appalachian Electric Power Company, Kentucky & West Virginia Power Company, Inc., and Kingsport Utilities, Inc. (original exhibit) [omitted]	2052	2539
55—Tabulation showing the number of customers, the kwh. sales, and the amount of revenue of the Appalachian Electric Power Company for the years 1928 to July 1, 1937, within 100, 150 and 250 miles of Norris Dam, together with the system total.....	2053	2540
56—Tabulation showing the number of customers, the kwh. sales, and the amount of revenue of the Kentucky & West Virginia Power Company, Inc., for the years 1928 to July 1, 1937, within 100, 150 and 250 miles of Norris Dam, together with the system total.....	2054	2541
57—Tabulation showing the number of customers, the kwh. sales, and the amount of revenue of the Kingsport Utilities, Inc., for the years 1928 to July 1, 1937, within 100, 150 and 250 miles of Norris Dam, together with the system total	2055	2542
58—Tabulation showing the miles of transmission and distribution lines of the Appalachian Electric Power Company for the years 1928 to July 31, 1937....	2056	2543
59—Tabulation showing the miles of transmission and distribution lines of the Kentucky & West Virginia Power Company, Inc., for the years 1928 to July 31, 1937	2057	2544
60—Tabulation showing the miles of transmission and distribution lines of the Kingsport Utilities, Inc., for the years 1928 to July 31, 1937.....	2058	2545
61—Tabulation showing the average residential kwh. use per customer, the residential revenue per customer, the residential average rate per kwh. and the number of towns and communities served by the Appalachian Electric Power Company for the years 1928 to July 31, 1937.....	2059	2546

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
62—Tabulation showing the average residential kwh. use per customer, the residential revenue per customer, the residential average rate per kwh. and the number of towns and communities served by the Kentucky & West Virginia Power Company, Inc., for the years 1928 to July 31, 1937.....	2060	2547
63—Tabulation showing the average residential kwh. use per customer, the residential revenue per customer, and the residential average rate per kwh. of Kingsport Utilities, Inc., for the years 1928 to July 31, 1937.....	2061	2548
64—Tabulation showing history of and savings due to rate reductions for all customer classes of Appalachian Electric Power Company (omitted).....	2062	2549
65—Tabulation showing history of and savings due to rate reductions for all customer classes of Kentucky & West Virginia Power Company, Inc. (omitted).....	2063	2549
66—Tabulation showing history of and savings due to rate reductions for all customer classes of Kingsport Utilities, Inc. (omitted)	2064	2549
67—Tax exhibit of Appalachian Electric Power Company	2065	2550
68—Tax exhibit of Kentucky & West Virginia Power Company, Inc.....	2067	2550
69—Tax exhibit of Kingsport Utilities, Inc....	2068	2550
70—Memorandum of approval and consent, data as to franchises held by Kingsport Utilities, Inc. (omitted)	2069	2551
71—Memorandum of franchises granted West Tennessee Power & Light Company and Commission approvals thereof (omitted)	2069	2551
72—Memorandum of consents of Tennessee municipalities and orders of approval of Tennessee Railroad and Public Utilities Commission to assignments of municipal and county franchises to West Tennessee Power & Light Company (omitted).....	2069	2551
73—Tax exhibit of West Tennessee Power & Light Company	2070	2552
74—Map showing lines and facilities of West Tennessee Power & Light Company (original exhibit) [omitted].....	2071	2553

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
75—List showing location and capacity of generating facilities owned and leased by West Tennessee Power & Light Company	2072	2553
76—Statistical exhibit showing development of West Tennessee Power & Light Company from 1927 to July 31, 1937.....	2073	2554
77—Memorandum of consents of Tennessee municipalities and orders of approval of Tennessee Railroad and Public Utilities Commission to assignments of municipal and county franchises to East Tennessee Light & Power Company and Tennessee Eastern Electric Company (omitted)...	2074	2555
78—Memorandum of franchises granted East Tennessee Light & Power Company and Tennessee Eastern Electric Company and Commission approvals thereof (omitted)	2074	2555
79—List of Virginia highway permits granted East Tennessee Light & Power Company (omitted)	2074	2555
80—Tax exhibit of East Tennessee Light & Power Company	2075	2556
81—Tax exhibit of Tennessee Eastern Electric Company	2076	2556
82—Map showing territory served by East Tennessee Light & Power Company and Tennessee Eastern Electric Company and transmission and distribution lines and facilities of said companies (original exhibit) [omitted]	2077	2557
83—List of generating facilities of East Tennessee Light & Power Company and Tennessee Eastern Electric Company.....	2078	2557
84—Statistical exhibit showing development of East Tennessee Light & Power Company from 1927 to July 31, 1937.....	2079	2558
85—Statistical exhibit showing development of Tennessee Eastern Electric Company from 1927 to July 31, 1937.....	2080	2558
86—Tax exhibit of Southern Tennessee Power Company	2081	2558
87—Memorandum of orders of Alabama Public Service Commission and consents of municipalities to the assignment of franchises to Alabama Power Company (omitted)	2082	2559

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
88—List of certificates of convenience and necessity issued by Alabama Public Service Commission to Alabama Power Company for extensions and additions to its system from October 1, 1920, to July 21, 1937 (omitted)	2082	2559
89—Map of electric transmission and distribution system of Alabama Power Company (original exhibit) [omitted]	2082	2559
90—List of generating plants owned by Alabama Power Company, with the installed capacity of each	2083	2559
91—Excerpts taken from applications to Federal Power Commission for licenses and from Federal Power Commission licenses held by Alabama Power Company in connection with Martin, Mitchell and Jordan Dams	2084	2560
92—An Act of Congress permitting the erection of a dam across Coosa River at the place selected for Lock No. 12 on said river (omitted)	2125	2598
93—The approval by the Secretary of War of plans concerning the location of the lock at Lock No. 12 and of the supplemental plans for the construction of Lock No. 12	2126	2598
94—Federal Power Commission approval of transfer to Alabama Power Company of licenses for projects 82, 349 and 618 (omitted)	2129	2602
95—Tabulation showing the annual revenue and kwh. sales of Alabama Power Company to customers within the State for the years 1933 and 1936 in the areas 100, 150 and 250 miles from TVA dams, first, including sales to the Birmingham Electric Company, and second, excluding sales to the Birmingham Electric Company	2130	2608
96—Statistical exhibit showing the growth of the Alabama Power Company from the year 1927 to June 30, 1937	2131	2604
97—Tax exhibit of Alabama Power Company ..	2132	2604
98—Chart showing the weekly territorial loads of The Alabama Power Company for the years 1935, 1936 and 1937 (original exhibit) [omitted]	2133	2605

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
99—Charts from the "Annalist" showing the "Annalist" index of business activities for the years 1924 to 1937 and the activities in several selected lines of business for the years 1931 to 1937.....	2134	2606
99 (a)—That part of Exhibit 99 which pertains to electric power production.....	2134	2606
100—Tax exhibit of Mississippi Power & Light Company	2135	2606
101—Map showing electric lines and facilities of Mississippi Power & Light Company (original exhibit) [omitted].....	2136	2607
102—Statement of customers, kwh. sales, and electric revenues for the years 1933 and 1936 segregated to areas within a radius of 150 and 250 miles of Pickwick Dam...	2137	2607
103—Tabulation of installed generating plants of Mississippi Power & Light Company, showing capacity and location, as of December 31, 1936.....	2138	2607
104—Statistical exhibit showing the development of the Mississippi Power & Light Company from 1927 to August 31, 1937.....	2139	2608
105 (Excerpts from)—House document No. 328, part (1) (original exhibit).....	2140	2609
105 (a)—Table appearing at pages 98 and 99 of House Document 328	2148	2616
105 (b)—Table appearing at page 100 of House Document 328	2149	2616
105 (c)—Plate 7 of Part 2 of House Document 328 (original exhibit) (omitted)	2150	2617
105 (d)—Plate 8 of Part 2 of House Document 328 (original exhibit) [omitted].....	2151	2617
106 (Excerpts from)—Annual Report of Chief of Engineers of United States Army, 1932 (original exhibit).....	2152	2617
106 (a)—Table on page 1207 of Exhibit 106....	2153	2618
107 (Excerpts from)—Annual Report of Chief of Engineers of United States Army, 1936, part (1) (original exhibit).....	2155	2619
107 (a)—Table on page 1083 of Exhibit 107....	2156	2620
108 (Excerpts from)—Hearings before the Sub-Committee of the House Committee on Appropriations, 1933, Seventy-Third Congress, First Session (original exhibit)	2158	2621
109 (Excerpts from)—Hearings before the Sub-Committee of the House Committee on Appropriations, Seventy-Third Congress, Second Session, 1934 (original exhibit)	2161	2623

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
110—Statement with reference to the relevancy, materiality and competency of the TVA minutes described in paragraph 1 of the subpoena duces tecum...	2180	2643
111—Statement with reference to the relevancy, and competency of documents and papers described in paragraphs 2 to 16, inclusive, of the subpoena duces tecum.	2195	2660
112 (Excerpts from)—Hearings before the Senate Committee on Appropriations, Seventy-Third Congress, Second Session, 1964 (original exhibit).....	2205	2674
113 (Excerpts from)—T. V. A. Annual Report for fiscal year ending June 30, 1964 (original exhibit)	2212	2681
114 (Excerpts from)—Hearings before the Subcommittee of the House Committee on Appropriations, Seventy-Fourth Congress, First Session, 1965 (original exhibit)	2216	2684
115 (Excerpts from)—Hearings before the Subcommittee of the House Committee on Appropriations, Seventy-Fourth Congress, Second Session, 1966 (original exhibit)	2222	2691
116 (Excerpts from)—Hearings before the Subcommittee of the House Committee on Appropriations, Seventy-Fifth Congress, First Session, 1967 (original exhibit) ..	2228	2700
116-A—Photostat of page 350 of Exhibit 116...	2252	2728
117—Appendix E (contracts), pages 157 to 236 of TVA Annual Report of fiscal year ending June 30, 1965.....	2253	2729
118—Appendix A (contracts), pages 141 to 260 of TVA Annual Report of fiscal year ending June 30, 1966.....	2296	2771
119—Power contract between TVA and Amory, Mississippi, October 15, 1966.....	2358	2846
120—Power contract between TVA and New Albany, March 1, 1967 (omitted).....	2367	2852
121—Supplemental contract between TVA and Okolona, March 24, 1967.....	2368	2853
122—Supplemental contract between TVA and Holly Springs, February 2, 1967.....	2370	2855
123—Power contract between TVA and Florence, July 6, 1966 (omitted)	2371	2856
124—Power contract between TVA and Tusculumbia, March 8, 1967 (omitted).....	2371	2857

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
125—Power contract between TVA and Knoxville, March 1, 1934.....	2372	2857
126—Power contract between TVA and Russellville, March 13, 1934.....	2373	2857
127—Power contract between TVA and Decatur, Alabama, March 14, 1934.....	2374	2858
128—Power contract between TVA and Gunterville, May 21, 1937.....	2375	2858
129—Power contract between TVA and Chattanooga, June 17, 1937.....	2376	2859
130—Power contract between TVA and Middlesboro, Kentucky, July 29, 1937.....	2377	2860
131—Amendatory contract between TVA and Middlesboro, Kentucky, October 20, 1937 (omitted)	2382	2866
132—Power contract between TVA and Trenton, Tennessee, August 23, 1937.....	2383	2867
133—Power contract between TVA and Jackson, Tennessee, September 1, 1937.....	2393	2873
134—Power contract between TVA and Paris, Tennessee, November 2, 1937.....	2402	2879
135—Power contract between TVA and Prentiss County Electric Power Association, December 1, 1936 (omitted).....	2411	2885
136—Power contract between TVA and Cullman County Electric Membership Corporation, August 4, 1936 (omitted)....	2411	2886
137—Power contract between TVA and Gibson County Electric Membership Corporation, August 13, 1936 (omitted)...	2412	2886
138—Power contract between TVA and Middle Tennessee Electric Membership Corporation, August 13, 1936 (omitted)...	2412	2886
139—Power contract between TVA and Pickwick Electric Membership Corporation, August 28, 1936 (omitted)	2413	2886
140—Power contract between TVA and Duck River Electric Membership Corporation, October 31, 1936 (omitted).....	2413	2887
141—Power contract between TVA and Southwest Tennessee Electric Membership Corporation, December 9, 1936 (omitted)	2414	2887
142—Power contract between TVA and Joe Wheeler Electric Membership Corporation, September 24, 1937.....	2415	2887
143—Power contract between TVA and Cherokee County Electric Membership Corporation, November 2, 1937.....	2416	2888

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
144—Power contract between TVA and Northeast Mississippi Electric Power Association, March 26, 1937 (omitted).....	2417	2888
145—Supplementary contract between TVA and Northeast Mississippi Electric Power Association, July 27, 1937.....	2418	2888
146—Power contract between TVA and Alabama Asphaltic Limestone Company, May 1, 1936 (omitted).....	2419	2889
147—Power contract between TVA and Good-year Decatur Mills, May 1, 1936 (omitted)	2419	2889
148—Power contract between TVA and L. & N. Ry. Company, June 22, 1936 (omitted).....	2420	2889
149—Power contract between TVA and Rockwood Alabama Stone Company, August 25, 1936 (omitted).....	2420	2890
150—Power contract between TVA and Robbins Tire & Rubber Company, November 1, 1936 (omitted)	2421	2890
151—Power Contract between TVA and Aluminum Company of America, July 20, 1937 (omitted)	2421	2890
152—Amendatory contract between TVA and Aluminum Company of America, dated July 20, 1937 (omitted)	2422	2890

VOLUME V.

153—Power contract between TVA and American Aggregates Corporation, March 29, 1937 (omitted).....	2423	2891
154—Power contract between TVA and Falkville Milling Company, April 1, 1937 (omitted)	2423	2891
155—Power contract between TVA and Wade & Richey, May 1, 1937 (omitted).....	2424	2891
156—Power contract between TVA and Lacey Asphaltic Limestone Company, May 13, 1937 (omitted).....	2424	2891
157—Power contract between TVA and Volunteer Portland Cement Company, August 14, 1936 (omitted).....	2425	2891
158—Assignment of contract between Volunteer Portland Cement Company and TVA	2426	2892
159—Contract between TVA and United States of America concerning Sardis Dam, March 14, 1937 (omitted)	2430	2894

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
160—Contract between TVA and Victor Chemical Works, July 2, 1937 (omitted).....	2430	2895
161—Contract between TVA and Electro Metallurgical Company, August 17, 1937 (omitted)	2431	2896
162—Construction contract between TVA and Meigs County Electric Membership Corporation, June 29, 1936.....	2432	2895
163—Construction contract between TVA and Cullman County Electric Membership Corporation, dated August 4, 1936.....	2449	2909
164—Construction contract between TVA and Cullman County Electric Membership Corporation, dated February 19, 1936....	2453	2911
165—Supplemental construction contract between TVA and Cullman County Electric Membership Corporation, dated February 27, 1937.....	2454	2912
166—Construction contract between TVA and North Georgia Electric Membership Corporation, September 4, 1936.....	2455	2913
167—Construction contract between TVA and Middle Tennessee Electric Membership Corporation, September 15, 1936.....	2456	2914
168—Construction contract between TVA and Southwest Tennessee Electric Membership Corporation, December 9, 1936....	2457	2914
169—Construction contract between TVA and Gibson County Electric Membership Corporation, March 30, 1937.....	2458	2915
170—Construction contract between TVA and Joe Wheeler Electric Membership Corporation, September 24, 1937.....	2459	2916
170-A—Construction contract between TVA and Joe Wheeler Electric Membership Corporation, May 14, 1937.....	2464	2919
171—Construction contract between TVA and Monroe County Electric Power Association, July 7, 1937.....	2472	2925
172—Construction contract between TVA and Duck River Electric Membership Corporation, June 15, 1937.....	2473	2925
173—Construction contract between TVA and City of Pulaski, August 23, 1935.....	2474	2926
174—Construction contract between TVA and City of Dayton, January 24, 1936.....	2479	2929
175—Construction contract between TVA and Town of Bolivar, September 7, 1937.....	2490	2937

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
176—Operating contract between TVA and Lincoln County Electric Membership Corporation, October 1, 1935.....	2491	2938
177—Supplemental contract between TVA and Lincoln County Electric Membership Corporation, June 19, 1936.....	2495	2941
178—Operating contract between TVA and Monroe County Electric Power Association, February 1, 1936.....	2496	2941
179—Operating contract between TVA and Pickwick Electric Membership Corporation, April 21, 1936	2499	2943
180—Operating contract between TVA and Bedford Electric Membership Corporation, May 18, 1936	2505	2947
181—Sale and loan contract between TVA and Gibson County Electric Membership Corporation, August 13, 1936	2510	2950
182—Map showing the location of new industries in the State of Alabama (original exhibit) [omitted]	2522	2960
183—Chart showing the Alabama Power Company gross sales of appliances annually from 1927 to 1936 (original exhibit) [omitted]	2523	2960
184—Graph showing the number of miles of rural lines of the Alabama Power Company in each of the years from 1923 to date (original exhibit) [omitted].....	2523	2960
185—Copy of the rules of the Alabama Public Service Commission concerning rural lines	2524	2961
186—Memorandum listing municipalities which sold their systems to the Alabama Power Company	2531	2967
187—Rotogravure pamphlet issued by the Electric Home and Farm Authority (original exhibit) [omitted]	2532	2968
188—Booklet printed by the United States Printing Office describing the various TVA projects (original exhibit).....	2533	2969
189—Booklet entitled "TVA Electricity Rates" (original exhibit)	2533	2977
190—Booklet entitled "Development of the Tennessee Valley" (original exhibit)..	2533	2985
191—List of Alabama towns voting to acquire electric systems in the years 1933 to 1937	2534	3001

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
192—Comparison of the rates of the Alabama Power Company and the TVA.....	2535	3002
193—Contingent power contract between residential consumers and the City of Albertville, Alabama (omitted)	2536	3003
194—Letter from Rockwood Alabama Stone Company to Alabama Power Company, giving notice of termination of contract.	2537	3003
195—Letter from Decatur Iron & Steel Company to Alabama Power Company, giving notice of termination of contract...	2538	3004
196—Power contract between TVA and Alcorn County Electric Power Association, dated June 30, 1937.....	2539	3004
197—Binder contract signed by Hammond Green with the City of Albertville, Alabama	2541	3006
198—Comparison of The Tennessee Electric Power Company and Tennessee Valley Authority rates	2542	3007
199—Map of Northeast Mississippi showing lines of Mississippi Power Company, TVA, cooperatives and municipalities (original exhibit) [omitted].....	2542	3007
200—Letters from the City of Columbus to the Mississippi Power Company.....	2544	3008
201—Letters from the City of Aberdeen to the Mississippi Power Company.....	2547	3011
202—Letter from the Mayor of Starkville to the Mississippi Power Company.....	2552	3015
203—Binder contract circulated in the City of Columbus, Mississippi	2553	3016
204—Questionnaire filled out by J. L. Street for the City of Columbus, Mississippi.....	2554	3016
205—Map of West Tennessee and Paris districts of Kentucky-Tennessee Light & Power Company (original exhibit) [omitted]	2558	3017
206—Map of North Tennessee division of the Tennessee Electric Power Company (original exhibit) [omitted]	2559	3017
207—Map of East Tennessee division of Tennessee Electric Power Company (original exhibit) [omitted]	2560	3017
208—Map of Middle Tennessee division of The Tennessee Electric Power Company (original exhibit) [omitted].....	2561	3017

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
209—Map of Cumberland division of The Tennessee Electric Power Company (original exhibit) [omitted]	2562	3018
210—Map of West Tennessee Power & Light Company territory (original exhibit) [omitted]	2563	3018
211—List of former customers of West Tennessee Power & Light Company now being served by the City of Jackson with TVA power	2564	3019
212—Letter November 2, 1937 from Thompson Baking Company to West Tennessee Power & Light Company.....	2565	3020
213—Letter of Earl Wall of TVA distributed in West Tennessee Power & Light Company territory	2566	3021
214-223, incl.—Franchises granted by Alabama counties to TVA	2567	3022
224—Power contract dated November 3, 1937 between TVA and Tippah County Electric Power Association	2572	3026
225-264, incl.—Franchises granted by Tennessee Counties to TVA.....	2573	3026
265—Franchise from Town of Fayetteville to TVA	2594	3037
266—Map of Tennessee showing counties granting franchises to TVA (original exhibit) [omitted]	2597	3040
267-274, incl.—Charters of Alabama Co-operative Associations	2598	3040
275-319, incl.—Franchises granted by Tennessee counties to co-operative associations	2607	3049
320—Map of Tennessee showing counties granting franchises to co-operative associations (original exhibit) [omitted].....	2631	3066
321—Map of Tennessee showing counties which have granted electric franchises to TVA counties which have granted electric franchises to electric membership corporations and counties which have granted electric franchises to both TVA and electric membership corporations (original exhibit) [omitted]	2632	3066
322—Certificate of Secretary of State showing TVA has not qualified to do business in Tennessee	2633	3066
323—Certificate of Secretary of State of Georgia showing TVA has not qualified to do business in Georgia.....	2635	3067

Record from D. C. U. S. Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
324—Certificate of Secretary of State showing TVA has not qualified to do business in Mississippi	2635	3067
325—Certificate of Secretary of State showing TVA has not qualified to do business in Alabama	2635	3068
326—Map of Northern Division of Alabama Power Company (original exhibit) [omitted]	2636	3068
327—Map entitled "Transmission and Distribu- tion systems of the complainant com- panies and transmission lines of others situated within 250 miles of any TVA dam whether constructed or authorized or recommended for construction" (orig- inal exhibit) [omitted]	2637	3068
328—Report to Congress by TVA on "The Uni- fied Development of the Tennessee River System" (original exhibit) [omitted]...	2638	3068
329—Map of the Dalton division of the Georgia Power Company (original exhibit) [omitted]	2639	3069
330—Map of the State of Georgia showing transmission and distribution system of the Georgia Power Company and mu- nicipalities in which that Company owns distribution systems and arcs 100, 150 and 250 miles from Chickamauga, Guntersville and Hiwassee Dams (orig- inal exhibit) [omitted]	2640	3069
331—Tabulation showing the number of cus- tomers and the total kwh. sales within each of the three zones shown on map, Exhibit 330	2641	3070
332—Map of the transmission and rural dis- tribution lines of the complainant com- panies, the Tennessee Valley Authority and the cooperatives (original exhibit) [omitted]	2642	3071
332-a—Map entitled "Transmission and rural distribution lines completed, under con- struction and proposed in the area pene- trated by TVA as of November 1, 1937" (original exhibit [omitted])	2642	3071
333—Map showing the relation of the TVA transmission lines to the load centers in the area (omitted)	2642	3071

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
333-a—Map entitled "TVA Transmission lines completed, under construction and proposed, and principal load centers of TVA and complainant companies situated within 100 miles of any TVA dam constructed, or authorized or recommended for construction" (original exhibit) [omitted]	2643	3071
334—Design of a system to serve existing TVA loads (original exhibit) [omitted].....	2643	3071
335—Map showing the transmission lines of the complainants and the load centers in the area (omitted)	2643	3072
335-a—Map entitled "Transmission lines of complainant companies completed and under construction and principal load centers of TVA and complainant companies situated within 100 miles of any TVA dam constructed or authorized or recommended for construction" (original exhibit) [omitted]	2644	3072
336—Maps showing the lines of the Tennessee Electric Power Company by five-year intervals from 1917 to date (original exhibit) [omitted]	2645	3072
337—Letter May 14, 1937 of notice sent by the Tennessee Railroad and Public Utilities Commission in connection with the proposed Nashville steam plant (omitted) .	2645	3072
338—Contract between the Yates Bleachery Company and The Tennessee Electric Power Company dated April 13, 1937 (omitted in printing)	2646	3072
339—Pencil memorandum in the hand writing of Mr. Ayres, containing a comparison of TVA, TEP Co., and the Georgia Power Company rates	2650	3073
340—Note left by Mr. Ayres with A. E. Yates, giving T. R. Hunnicutt's Chattanooga address (omitted)	2651	3073
341—Proposed contract between the Yates Bleachery Company and the North Georgia Electric Membership Corporation	2652	3074
342—Map and profile showing the low dam plan (original exhibit) [omitted].....	2666	3083
343—Map and profile showing the TVA plan (original exhibit) [omitted].....	2666	3083

Record from "O. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
344—Chart showing water traffic on the Tennessee River, 1927 to 1934, relation of sand and gravel movement (original exhibit) [omitted]	2666	3063
345—Chart showing the approximate distribution of average freight movements on the Tennessee River, 1927 to 1934, inclusive (original exhibit) [omitted]...	2666	3063
346—Chart showing a comparison of the alternative methods of developing the Tennessee River (original exhibit) [omitted]	2666	3063
347—A page from the Waterways Journal of St. Louis, Missouri, September 18, 1937, relating an incident concerning a storm near Wheeler Dam (omitted)	2667	3063
348—Tabulation showing the 1930 population of cities and towns on the Tennessee River and tributaries which suffer from flood damage	2668	3064
349—Table showing the flood damages to cities and towns, railways and highways in the entire Tennessee River Basin.....	2669	3064
350—Chart showing variation in flow day by day during the maximum flood to be expected on the Tennessee River at and above Chattanooga (Knoxville, Loudon and Chattanooga) (original exhibit) [omitted]	2670	3065
351—Chart of the flood profile of the Tennessee River from Knoxville to Chattanooga, showing the bottom of the river, the low water line, a line joining the highest stage at various points reached by the highest flood of record, and a line joining the peak stage at various points reached by the maximum flood to be expected (original exhibit) [omitted]..	2670	3065
352—Map of the Tennessee River Basin showing the location of the system of flood control reservoirs designed by Ford Kurtz and the existing power reservoirs in May, 1933 (original exhibit) [omitted]	2670	3065
353—Table showing certain engineering data on system of flood control to achieve maximum practicable protection	2671	3066

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
354—Map of the Tennessee River Basin showing the TVA Unified Plan recommended to Congress and the existing power reservoirs in May, 1963 (original exhibit) [omitted]	2672	3087
355—Table showing the engineering data on the elements of the TVA Unified Plan which would in any way affect floods at and above Chattanooga.....	2673	3088
356—Table listing the towns and cities on the main river and the Emory River showing the comparison of reductions in maximum flood stage above Chattanooga which would be brought about by the Kurtz system of flood control and the non-dependable reductions which might be brought about by the TVA Unified Plan	2674	3088
357—Chart showing reductions in flow day by day which would be brought about by flood control system recommended by Kurtz and by the TVA Unified Plan during the maximum flood to be expected on the Tennessee River at and above Chattanooga (Knoxville, Loudon and Chattanooga) (original exhibit) [omitted]	2675	3089
358—Chart showing the reduction in flow day by day which would be brought about at Harriman by the proposed flood control system during the maximum flood to be expected on the Emory River (original exhibit) [omitted].....	2675	3089
359—Graph entitled "Flood profile of the Tennessee River, Knoxville to Chattanooga, showing reductions in stage which would be brought about by recommended flood control system and by TVA Unified Plan" (original exhibit) [omitted].....	2675	3089
360—Table showing a comparison of lands which would be flooded by the recommended flood control system and by the TVA Unified Plan.....	2676	3090
361—Chart showing a comparison of the recommended flood control system and the TVA Unified Plan as to construction costs and additional prime power at sixty per cent load factor (original exhibit) [omitted]	2677	3091

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
362—Chart entitled "Comparison of the power and flood control functions of the Norris Dam and reservoir as constructed in TVA's Unified Plan with the proposed dam and reservoir on the Clinch River in the recommended flood control system" (original exhibit) [omitted].....	2677	3091
363—Tabulation showing the costs of transportation on land and on water.....	2678	3091
364 (Excerpts from)—Hearings before the Committee on Interstate and Foreign Commerce, House of Representatives, Seventy-Fourth Congress, First Session (original exhibit)	2679	3092
365 Excerpts from)—Hearings before the Committee on Military Affairs, House of Representatives, Seventy-Fourth Congress, First Session (original exhibit) .	2694	3110
366 (Excerpts from)—Hearings before the Committee on Military Affairs, House of Representatives, Seventy-Fourth Congress, First Session, Volume 2 (original exhibit)	2706	3121
367—Table showing combined one-hour peaks by months for the Appalachian Electric Power Company, the Kentucky and West Virginia Power Company and Kingsport Utilities, Inc. for the years 1928 to 1937	2711	3126
368—Graph showing the curve of the combined system peaks of Appalachian Electric Power Company, Kentucky & West Virginia Power Company, and Kingsport Utilities, Inc., and also the estimate of the demand for the future.....	2712	3126
369—Table showing by years the combined loads and generating capacities from 1928 to 1941 inclusive of the Appalachian Electric Power Company, the Kentucky and West Virginia Power Company and Kingsport Utilities, Inc.....	2713	3126
370—Graph showing the combined loads and generating capacities from 1928 to 1941 for Appalachian Electric Power Company, Kentucky & West Virginia Power Company, and Kingsport Utilities, Inc.....	2714	3126
371—Table "Summary of Capacities Available to Commonwealth & Southern System—1937 (Southern System)".....	2715	3127

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
372—Graph of Commonwealth & Southern Corporation southern properties, capacities and loads from 1929 to 1939 (original exhibit) [omitted]	2716	3128
373—Complete resolution of the Knoxville City Council dated February 21, 1933.....	2717	3128
374—A booklet consisting of ten sheets entitled "Adequacy of Power Supply Facilities, Carolina Power & Light Company, Tennessee Public Service Company and Holston River Electric Company".....	2718	3128
375—A booklet consisting of seven pages entitled "Adequacy of Power Supply Facilities, Arkansas Power & Light Company, Louisiana Power & Light Company, Memphis Power & Light Company, Mississippi Power & Light Company and West Tennessee Power & Light Company".....	2729	3139
376—A booklet consisting of three pages entitled "Birmingham Electric Company Actual and Estimated Load Data 1927 to 1940, inclusive"	2736	3146
377—A contingent power contract for residential consumers circulated in Scottsboro prior to the municipal election there.....	2739	3149
378—A letter, dated February 22, 1936, from David Lillenthal to Roy McCullough, Jr.	2740	3150
379—This number inadvertently was given to a non-existent deposition exhibit.....	2742	3153
380—Copy of an agreement dated April 6, 1936, between TVA and the promoters of the North Georgia Electric Membership Corporation	2743	3153
381—Petition for charter of the North Georgia Electric Membership Corporation [omitted]	2748	3155
382—Order of Whitfield County Superior Court granting the charter to the North Georgia Electric Membership Corporation [omitted]	2748	3156
383—Assignment of the promoters' agreement by the promoters to the North Georgia Electric Membership Corporation	2749	3156
384—Map of the lines of the North Georgia Electric Membership Corporation attached to the TVA-North Georgia Electric Membership Corporation construction contract of June, 1936 [omitted].....	2752	3157

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
385—Construction loan contract between the United States of America (REA) and North Georgia Electric Membership Corporation dated September 2, 1936 [omitted]	2753	3158
386—Mortgage deed of trust between North Georgia Electric Membership Corporation and the First National Bank of Dalton [omitted]	2753	3158
387—By-laws of the North Georgia Electric Membership Corporation	2754	3158
388—Article entitled "Here are the Answers" ..	2771	3169
389—Letter dated March 31, 1937, from R. Carter Pittman to T. R. Hunnicutt, Division Manager of TVA at Chattanooga ...	2775	3171
390—Transcribed notes of a meeting at Cullman on May 6, 1936, at which a cooperative organization was organized	2777	3173
391—Form TVA 189-DE [omitted]	2794	3184
392—TVA form 231-DE [omitted]	2794	3184
393—Rural electrification survey neighborhood plan, information sheet [omitted]	2794	3184
394—TVA form 211-DE for discount on wiring for electric ranges and water heaters ..	2795	3185
395—Check dated July 21, 1937, from TVA to T. L. Bonner for wiring house	2797	3186
396—Remittance advice from TVA to T. L. Bonner	2798	3187
397—Envelope in which matter was sent by TVA to T. L. Bonner	2799	3188
398—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of June 24, 1936	2800	3189
399—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of November 4, 1936	2818	3201
400—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation on November 13, 1936	2821	3204
401—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation dated March 4, 1937	2828	3209
402—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of March 19, 1937	2833	3212
403—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of April 6, 1937	2837	3215

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
404—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of June 4, 1937.....	2844	3220
405—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of June 16, 1937.....	2849	3223
406—Minutes of meeting of Directors of Middle Tennessee Electric Membership Corporation of July 6, 1937.....	2864	3233
407—By-laws of Middle Tennessee Electric Membership Corporation [omitted].....	2871	3238
408—TVA Proposed Rural Electrical Development, Rutherford-Wilson project.....	2872	3238
409—Map entitled "Mississippi River System, drainage areas of main tributaries" (original exhibit) [omitted].....	2882	3244
410—Map showing Mississippi River flood control plan (original exhibit) [omitted]..	2883	3244
411—Diagram showing relation between valley storage without dam, valley storage eliminated by reservoir, and controllable storage available	2884	3244
412—Letter dated September 8, 1937, to J. F. Burleson, as Mayor of Haleyville, from Martin G. Glaser of TVA.....	2885	3244
413—Letter dated February 12, 1935, from F. F. Beauchamp of TVA to the City of Cullman, Alabama [omitted].....	2886	3245
414—Letter dated April 13, 1936, to F. F. Beauchamp of TVA from Mayor Dunlap of Cullman [omitted]	2886	3245
415—Letter dated May 27, 1936, to F. F. Beauchamp of TVA from Mayor Dunlap of Cullman [omitted]	2886	3245
416—Letter dated July 9, 1936, to Mayor Dunlap from F. F. Beauchamp [omitted]...	2886	3245
417—Letter dated August 4, 1936, to F. F. Beauchamp from Mayor Dunlap [omitted]..	2886	3246
418—Report of Electric Power Board of Review re City of Decatur, Alabama.....	2887	3246
419—Application for loan and grant by Sheffield, Alabama. (Original and revised applications)	2893	3249
420—Loan and grant contract between Sheffield, Alabama and PWA dated December 28, 1934	2895	3251
421—Application for loan and grant by Tusculum, Alabama. (Original and revised applications)	2916	3270

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.	Original	Print
422—Loan and grant contract between PWA and Tusculumbia, Alabama	2916	3270
423—Application for loan and grant by Courtland, Alabama	2917	3271
424—Loan and grant contract between Courtland, Alabama, and PWA [omitted].....	2919	3272
425—PWA Form 210, dated July 1, 1936, entitled "Terms and Conditions [omitted]....	2919	3272
426—Application for loan and grant by Decatur, Alabama	2920	3273
427—PWA loan and grant contract with the City of Decatur, dated December 6, 1934....	2923	3276
428—Letter from David Lillenthal to Captain R. H. Elliott, Director of PWA, dated April 6, 1934, re Decatur application.....	2924	3276
429—Letter dated April 10, 1934, to David E. Lillenthal from R. H. Elliott in reply to preceding Exhibit.....	2926	3278
430—Application for loan and grant by Hart-selle, Alabama	2927	3278
431—PWA loan and grant contract with Hart-selle, Alabama [omitted]	2929	3280
432—Supplemental PWA contract with Hart-selle, Alabama, dated December 4, 1935..	2929	3281
433—Application for loan and grant by Muscle Shoals, Alabama	2930	3281
434—PWA loan and grant contract dated December 16, 1935, with Muscle Shoals, Alabama [omitted]	2931	3282
435—Subsequent PWA contract with Muscle Shoals, Alabama, dated February 29, 1936 [omitted]	2931	3282
436—Application for loan and grant by Russell-ville, Alabama	2931	3282
437—PWA loan and grant contract with Russellville, Alabama, dated November 9, 1935 [omitted]	2932	3283
438—Subsequent PWA contract with Russell-ville, Alabama, dated December 4, 1935 [omitted]	2932	3283
439—Application for loan and grant by Gun-tersville, Alabama.....	2932	3283
440—PWA loan and grant contract with Gun-tersville, Alabama, dated November 2, 1935 [omitted]	2935	3286
441—PWA contract with City of Guntersville, Alabama, dated December 4, 1935 [omit- ted]	2935	3286

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
442—Application for loan and grant by Tarrant City, Alabama. (Original and revised applications)	2935	3286
443—PWA loan and grant contract with Tarrant City, Alabama.....	2938	3289
444—Application for loan and grant by Bessemer, Alabama. (Original and revised applications)	2939	3290
445—Hackett. PWA loan and grant contract with Bessemer, Alabama.....	2943	3294
446—Memorandum from O. M. Rau of the Electrical Power Board of Review of PWA to Henry T. Hunt, PWA Deputy Administrator, dated August 29, 1964.....	2944	3295
447—Letter dated August 31, 1964, to David E. Lillenthal from Henry T. Hunt.....	2949	3298
448—Letter dated September 11, 1964, from V. D. J. Robinson, of TVA, to Henry T. Hunt	2950	3299
449—Letter dated September 22, 1964, from David E. Lillenthal to Henry T. Hunt..	2951	3300
450—Letter dated October 8, 1964, from David E. Lillenthal to Henry T. Hunt.....	2953	3301
451—Application for loan and grant by Starkville, Mississippi	2954	3301
452—PWA loan and grant contract with Starkville, Mississippi [omitted].....	2955	3302
453—Application for loan and grant by Okolona, Mississippi [omitted]	2955	3302
454—PWA loan and grant with Okolona, Mississippi [omitted].....	2956	3302
455—Subsequent PWA contract with Okolona, Mississippi [omitted]	2956	3302
456—Application for loan and grant by Aberdeen, Mississippi [omitted].....	2956	3303
457—PWA loan and grant contract with Starksville, Mississippi [omitted].....	2957	3304
458—PWA loan and grant contract with Aberdeen, Mississippi [omitted].....	2957	3304
459—Application for loan and grant by Knoxville, Tennessee., dated November 15, 1963	2958	3304
460—PWA loan and grant contract with Knoxville, dated April 2, 1964.....	2960	3305
461—Telegram dated February 18, 1964, from B. W. Thoron, Assistant Finance Director of PWA, to Joseph C. Swidler, TVA attorney	2963	3309

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
462—Letter dated February 16, 1934, from B. W. Thoron to Joseph C. Swidler.....	2964	3309
463—Letter dated February 17, 1934, from B. W. Thoron to Miss Owen of TVA.....	2966	3310
464—Letter dated March 8, 1934, from H. M. Walte, PWA Deputy Administrator, to David E. Lillenthal of TVA.....	2967	3311
465—Letter dated March 23, 1934, from P. M. Benton, PWA Finance Director, to David E. Lillenthal of TVA.....	2969	3312
466—Excerpt from minutes of meeting of Board of Light and Water Commissioners of Memphis, Tennessee	2970	3312
467—Application for loan and grant by City of Newbern, Tennessee [omitted]	2971	3313
468—PWA loan and grant contract with Newbern, Tennessee [omitted]	2971	3313
469—Letter dated June 30, 1933 from David E. Lillenthal to Kenneth Markwell, State PWA Director	2972	3314
470—Application for loan and grant by Paris, Tennessee [omitted]	2973	3314
471—PWA loan and grant contract with Paris, Tennessee [omitted]	2974	3314
472—Application for loan and grant by Somerville, Tennessee [omitted].....	2974	3315
473—PWA loan and grant contract with Somerville, Tennessee [omitted].....	2974	3315
474—Application for loan and grant by City of Jackson, Tennessee [omitted].....	2975	3315
475—PWA loan and grant contract with Jackson, Tennessee [omitted]	2975	3315
476—Application for loan and grant by Fayetteville, Tennessee [omitted].....	2975	3315
477—PWA loan and grant contract with Fayetteville, Tennessee [omitted]	2976	3316
478—Application for loan and grant by City of Chattanooga, Tennessee [omitted].....	2976	3316
479—Application for loan and grant by Murfreesboro, Tennessee [omitted]	2976	3316
480—Letter dated Dec. 20, 1933 from Joseph C. Swidler, of TVA, to K. S. Wingfield, of PWA	2977	3316
481—Letter from K. S. Wingfield, of PWA, to Joseph Swidler, TVA attorney, dated December 22, 1933.....	2980	3320
482—Letter dated October 24, 1934 from Henry T. Hunt, of PWA, to V. D. L. Robinson, of TVA	2981	3320

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
483—Resolution of the PWA concerning application of Decatur, Alabama	2982	3321
484—List of PWA projects bringing status of these projects in this territory up to date	2983	3321
485—Senate document 184, Seventy-Fourth Congress, Second Session (original exhibit) [omitted]	2990	3329
486—Table showing kwhr. generated including both firm and secondary power in the seven States of the Tennessee Valley....	2991	3329
487—Comparison of average of the yield of bonds of nine of the complainant Companies with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2992	3329
488—Comparison of the yield of Alabama Power Company 4½% bonds due 1967 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]....	2992	3329
489—Comparison of the yield of Appalachian Electric Power Company 5% bonds due 1956 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2992	3330
490—Comparison of the yield of Birmingham Electric Company 4½% bonds due 1968 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2992	3330
491—Comparison of the yield of Carolina Power & Light Company 5% bonds due 1956 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted].....	2992	3330
492—Comparison of the yield of Memphis Power & Light Company 5% bonds due 1948 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2993	3330

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
493—Comparison of the yield of Mississippi Power Company 5% bonds due 1955 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]....	2903	3330
494—Comparison of the yield of Mississippi Power & Light Company 5% bonds due 1957 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2903	3331
495—Comparison of the yield of The Tennessee Electric Power Company 6% bonds due 1947 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2903	3331
496—Comparison of the yield of Tennessee Public Service Company 5% bonds due 1970 with Standard Statistics Company's average yields of public utility bonds by quality group (original exhibit) [omitted]	2903	3331
497—Subpoena duces tecum to TVA to produce a copy of a telegram from TVA dated between January 1st and 15th, 1935, to the Governor of Alabama, stating the terms and provisions of a proposed statute to be submitted to the Legislature of Alabama	2904	3331
498—Resolution dated March 29, 1937, of the Town of Moulton, Alabama.....	2906	3332
499—Table showing annual sales by existing utility systems to ultimate consumers in the year 1936 within 100 miles, 150 miles, and 250 miles from any TVA generating plant	2906	3332
500—Table showing miles of transmission lines of complainant companies.....	2907	3333
501—Summary of adequacy of principal utility company systems within 250 miles of TVA generating plants included in the Unified Plan	2908	3334
502—Detailed summary of adequacy of principal utility company systems within 250 miles of TVA generating plants showing the companies which constitute each of the groups	2909	3335

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
503—Map showing the generating systems surrounding TVA (original exhibit) [omitted]	3006	3343
504—Table showing power cost at TVA generating plants, Unified Plan—ultimate development, excluding initial stage of Wilson Dam	3007	3343
505—Table showing out-of-pocket costs of TVA power, Unified Plan—ultimate development, excluding initial stage of Wilson Dam	3008	3344
506—Summary of annual deficit from TVA operations, Unified Plan—ultimate development, excluding initial stage of Wilson Dam	3009	3345
507—Table showing estimated power available at TVA generating plants in a typical water year under TVA Unified Plan—ultimate development	3010	3347
508—Summary of power sales, TVA Unified Plan, ultimate development—1943 sales under typical water conditions.....	3011	3349
509—Table showing disposition of generating plant output of TVA Unified Plan—ultimate development	3012	3350
510—Table showing estimated annual sales to ultimate consumers 1937-1943 if served by existing utility systems under the present sales policies within 100, 150, and 250 miles from any TVA generating plant	3013	3351
511—Estimate of Complainant Companies' load displaced by TVA.....	3014	3352
512—Table showing estimated damage per million kwh. displaced.....	3015	3354
513—Table showing total damage by displacement	3016	3354
514—Table showing estimated damage to Complainant Companies which would result if forced by competition to reduce rates to TVA levels—year 1943.....	3017	3355
515—A sketch to indicate pictorially the various elements in a generating, transmission and distribution system.....	3018	3356
516—TVA Board of Directors resolution dated July 23, 1935, and allotment release attached concerning rural transmission line in Lee County, Mississippi [omitted]	3019	3357

Record from D. C. U. S., Eastern District of Tennessee -
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
517—TVA Board of Directors resolution dated July 25, 1935, with allotment release attached concerning transmission line from Blue Springs to Fairfield in Union County, Mississippi [omitted].....	3019	3357
518—TVA Board of Directors resolution dated August 29, 1935, and allotment release attached concerning rural lines in Prentiss County, Mississippi.....	3019	3357
519—TVA Board of Directors resolution dated October 10, 1935, and allotment release attached concerning the Tupelo-New Albany 44 kv. line.....	3020	3357
520—TVA Board of Directors resolution dated November 18, 1935, and allotment release attached concerning transformer installation at Corinth Steam Plant....	3020	3358
521—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning Pulaski-Columbia-Dickson transmission line and substation [omitted]	3020	3358
522—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning Wheeler Dam-Columbia transmission line and Columbia substation [omitted]	3021	3358
523—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning construction of rural lines in Rhea County for the City of Dayton	3021	3358
524—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning Bodenham extension from Pulaski, Tennessee [omitted].....	3021	3359
525—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning construction of substation west of Ardmore, Lincoln County, Tennessee [omitted]	3022	3359
526—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning rural lines in Itawamba County, Mississippi [omitted]..	3022	3359
527—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning rural lines in Lee County, Mississippi [omitted].....	3022	3359

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
528—TVA Board of Directors resolution dated January 11, 1936, and allotment release attached concerning rural lines in Lincoln County, Tennessee [omitted].....	3022	3360
529—TVA Board of Directors resolution dated January 18, 1936, and allotment release attached concerning extension of rural line in Monroe County, Mississippi.....	3023	3360
530—TVA Board of Directors resolution dated January 18, 1936, and allotment release attached concerning rural lines in Hardin and McNairy Counties, Tennessee.....	3023	3360
531—TVA Board of Directors resolution dated January 18, 1936, and allotment release attached concerning rural electrification project in Bedford County, Tennessee..	3024	3361
532—TVA Board of Directors resolution dated March 17, 1936, and allotment release attached concerning Milan-Bolivar-Somerville transmission line	3025	3361
533—TVA Board of Directors resolution dated March 17, 1936, and allotment release attached concerning rural electrification project in Gibson County, Tennessee...	3025	3362
534—TVA Board of Directors resolution dated April 14, 1936, and allotment release attached concerning rural line extensions for Prentiss County Electric Power Association	3026	3363
535—TVA Board of Directors resolution dated April 14, 1936, and allotment release attached concerning rural line construction in Catoosa County, Georgia.....	3027	3364
536—TVA Board of Directors resolution dated June 19, 1936, and allotment release attached thereto concerning transformer station at Ooltewah	3027	3364
537—TVA Board of Directors resolution dated June 29, 1936, and allotment release attached concerning rural lines for the North Georgia Electric Membership Corporation in Tennessee and Georgia.....	3028	3365
538—TVA Board of Directors resolution dated July 1, 1936, and allotment release attached concerning rural electrification project in Cullman County, Alabama....	3028	3366
539—TVA Board of Directors resolution dated July 6, 1936, and allotment release attached concerning the construction of the Pickwick-Memphis transmission line	3029	3366

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
540—TVA Board of Directors resolution dated July 14, 1936, and allotment release attached concerning the rural line construction for Meigs County Electric Membership Corporation	3030	3367
541—TVA Board of Directors resolution dated August 21, 1936, and allotment release attached concerning construction of south side of Memphis substation.....	3030	3367
542—TVA Board of Directors resolution dated September 5, 1936, and allotment release attached concerning additional rural lines in Lincoln County, Tennessee.....	3031	3368
543—TVA Board of Directors resolution dated September 21, 1936, and allotment release attached concerning rural and transmission lines for the Middle Tennessee Electric Membership Corporation.....	3031	3368
544—TVA Board of Directors resolution dated September 23, 1936, and allotment release attached concerning rural line construction for City of Athens in Limestone County, Alabama	3032	3369
545—TVA Board of Directors resolution dated September 25, 1936, and allotment release attached concerning Jackson-Trenton 44 kv. line and substation.....	3032	3369
546—TVA Board of Directors resolution dated October 6, 1936, and allotment release attached concerning rural line construction in Cullman County, Alabama.....	3033	3370
547—TVA Board of Directors resolution dated October 22, 1936, and allotment release attached concerning Mimosa rural line extension in Lincoln County, Tennessee [omitted]	3034	3371
548—TVA Board of Directors resolution dated October 26, 1936, and allotment release attached concerning New Albany, Mississippi, rural line.....	3034	3371
549—TVA Board of Directors resolution dated December 7, 1936, and allotment release attached concerning rural lines for Gibson County Electric Membership Corporation	3035	3372
550—TVA Board of Directors resolution dated December 7, 1936, and allotment release attached concerning rural lines for Southwest Tennessee Electric Membership Corporation	3035	3372

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.	Original	Print
551—TVA Board of Directors resolution dated February 5, 1937, and allotment release attached concerning rural lines for Duck River Electric Membership Corporation, Tennessee	3036	3373
552—TVA Board of Directors resolution dated February 16, 1937, and allotment release attached concerning rural lines from Tom bigbee Electric Power Association, Mississippi	3036	3374
553—TVA Board of Directors resolution dated April 9, 1937, and allotment release attached concerning rural lines in Franklin County, Alabama	3037	3374
554—TVA Board of Directors resolution dated May 15, 1937, and allotment release attached concerning additions to Tupelo and Pontotoc substations and having reference to the Sardis Dam line.....	3038	3375
555—TVA Board of Directors resolution dated May 15, 1937, and allotment release attached concerning rural lines in Lawrence and Morgan Counties, Alabama..	3038	3376
556—TVA Board of Directors resolution dated May 15, 1937, and allotment release attached concerning rural line to New Harmony for the city of New Albany, Mississippi [omitted]	3039	3376
557—TVA Board of Directors resolution dated June 3, 1937, and allotment release attached concerning the Pontotoc-Sardis transmission line and Sardis substation [omitted]	3039	3377
558—TVA Board of Directors resolution dated June 3, 1937, and allotment release attached concerning the changes in the Hartselle substation [omitted].....	3039	3377
559—TVA Board of Directors resolution dated June 3, 1937, and allotment release attached concerning the rural line extension and substation changes for Tishomingo County Electric Power Association [omitted]	3040	3377
560—TVA Board of Directors resolution dated July 2, 1937, and allotment release attached concerning Northside Memphis substation [omitted]	3040	3377

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
561—TVA Board of Directors resolution dated July 2, 1937, and allotment release attached concerning additions to south Memphis substation [omitted].....	3040	3377
562—TVA Board of Directors resolution dated July 2, 1937, and allotment release attached concerning 110 kv. Arkansas tie line from Memphis [omitted].....	3040	3378
563—TVA Board of Directors resolution dated July 2, 1937, and allotment release attached concerning south Memphis-north Memphis 110 kv. tie line [omitted].....	3041	3378
564—TVA Board of Directors resolution dated July 23, 1937, and allotment release attached concerning service to the Volunteer Portland Cement Company.....	3041	3378
565—TVA Board of Directors resolution dated August 13, 1937, and allotment release attached concerning rural lines for the Duck River Electric Membership Corporation, Tennessee	3041	3378
566—TVA Board of Directors resolution dated August 13, 1937, and allotment release attached concerning rural lines for South west Tennessee Electric Membership Corporation	3042	3379
567—TVA Board of Directors resolution dated September 14, 1937, and allotment release attached concerning transmission system reinforcement in middle Tennessee.....	3042	3379
568—TVA Board of Directors resolution dated October 16, 1933, authorizing contracts with Florence, Tuscumbia, Sheffield, Muscle Shoals and other municipalities on the Tupelo transmission line.....	3043	3379
569—TVA Board of Directors resolution dated December 15, 1933 authorizing Mr. Lillenthal to create a corporation to discount commercial paper to be obtained from manufacturers of electrical appliances licensed by TVA (EHFA)	3043	3380
570—TVA Board of Directors resolution dated December 16, 1933, approving the construction of rural lines in the five Mississippi counties of Lee, Pontotoc, Monroe, Alcorn, Tishomingo, and Lauderdale county in Alabama.....	3043	3380

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
571—TVA Board of Directors resolution dated April 13, 1934, concerning the employment of Young and Rubicam.....	3046	3384
572—TVA Board of Directors resolution dated June 3, 1937, authorizing Dr. Morgan to write a letter to the War Department with reference to Sardis Dam and the line thereto	3048	3386
573—TVA Board of Directors resolution dated October 5, 1937, and the exhibit attached thereto concerning the construction of power houses at Chickamauga and Guntersville dams	3050	3388
574—TVA Board of Directors resolution dated July 30, 1933, authorizing the construction of a transmission line from Wilson Dam to Cove Creek.....	3051	3389
575—TVA Board of Directors resolution dated October 16, 1933, authorizing certain basic provisions to be placed in the contracts between TVA and municipalities, a copy of which provisions is attached to the resolution	3051	3389
576—TVA Board of Directors resolution dated October 16, 1933, approving the wholesale rate schedule for Tupelo, a copy of which is attached	3055	3393
577—TVA Board of Directors resolution dated May 31, 1934, authorizing a contract which is attached between TVA and the Alcorn County E. P. A.....	3056	3395
578—A series of resolutions of the Board of Directors dated July 27, 1934, and the contract between TVA and the Carolina Power and Light Company attached thereto	3061	3401
579—TVA Board of Directors resolution concerning Young and Rubicam contract..	3064	3406
580—TVA Board of Directors resolution dated October 9, 1934, with the attached resolution of the city council of Knoxville..	3065	3406
581—TVA Board of Directors resolution dated March 18, 1935, authorizing a contract attached thereto with EHFA.....	3069	3412
582—TVA Board of Directors resolution dated May 7, 1935, approving an agreement between TVA and the city of Athens dated April 23, 1935, attached thereto.....	3076	3421

Record from D. C. U. S., Eastern District of Tennessee—
Continued

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
583—TVA Board of Directors resolution dated July 25, 1935, approving a contract between TVA and Tishomingo County Electric Power Association dated July 19, 1935, a copy of which is attached thereto [omitted]	3079	3426
584—TVA Board of Directors resolution dated November 16, 1935, approving a contract between TVA and Tombigbee Electric Power Association dated October 19, 1935, a copy of which is attached thereto [omitted]	3080	3427
585—TVA Board of Directors resolution dated November 16, 1935, approving a contract with the City of Dayton entitled "Agreement for Cooperation in Construction of Rural Lines," November 2, 1935.....	3081	3427
586—TVA Board of Directors resolution dated November 16, 1935, approving a supplementary contract between TVA and Alcorn County Electric Power Association, August 26, 1936, a copy of which is attached thereto [omitted]	3083	3430
587—TVA Board of Directors resolution dated December 20, 1935, approving a contract between TVA and New Albany, Mississippi, a copy of which is attached thereto [omitted]	3083	3430
588—TVA Board of Directors resolution dated December 23, 1935, approving the contract between TVA and Lincoln County Electric Membership Corporation for the collection of bills and other services dated October 1, 1935, a copy of which is attached thereto [omitted].....	3083	3430
589—TVA Board of Directors resolution dated December 31, 1935, approving a supplementary contract between TVA and Alcorn County Electric Power Association dated December 31, 1935, a copy of which is attached thereto.....	3084	3430
590—TVA Board of Directors resolution dated January 10, 1936, authorizing construction of a dam in the Hiwassee River on the Fowler Bend site.....	3085	3432
591—TVA Board of Directors resolution dated December 31, 1935, authorizing construction of Chickamauga Dam.....	3086	3433

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
502—TVA Board of Directors resolution dated January 18, 1936, approving a sale and loan contract between TVA and Monroe County Electric Power Association, dated January 15, 1936, a copy of which is attached thereto.....	3086	3433
503—TVA Board of Directors resolution dated February 1, 1936, approving a contract between TVA and Dayton, Tennessee, for the sale of rural lines, dated January 24, 1936, a copy of which is attached thereto	3090	3439
504—TVA Board of Directors resolution dated February 10, 1936, approving a contract between TVA and the city of Amory dated February 14, 1936, a copy of which is attached thereto [omitted].....	3093	3441
505—TVA Board of Directors resolution dated February 11, 1936, approving a sale and loan contract between TVA and Pontotoc County Electric Power Association dated February 12, 1936, a copy of which is attached thereto.....	3093	3441
506—TVA Board of Directors resolution dated February 11, 1936, approving a contract between TVA and Monroe County Electric Power Association concerning the operation of rural lines and the collection of bills dated February 1, 1936, a copy of which is attached thereto [omitted]	3100	3451
507—TVA Board of Directors resolution dated April 27, 1936, approving a contract between Alcorn County Electric Power Association, Pickwick Electric Membership Corporation and TVA dated April 21, 1936, a copy of which is attached thereto	3101	3451
508—TVA Board of Directors resolution dated April 27, 1936, approving the execution of a quitclaim deed from the TVA to the Alcorn County Electric Power Association [omitted].....	3105	3457
509—TVA Board of Directors resolution dated April 27, 1936, approving a contract between Pickwick Electric Membership Corporation and TVA dated April 21, 1936, a copy of which is attached thereto	3105	3457

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
600—TVA Board of Directors resolution dated April 27, 1936, approving a contract between TVA and Alcorn County Electric Power Association dated April 21, 1936, a copy of which is attached thereto [omitted]	3105	3457
601—TVA Board of Directors resolution dated May 28, 1936, approving an operation contract between Bedford County Electric Membership Corporation and TVA dated May 18, 1936, a copy of which is attached thereto.....	3105	3457
602—TVA Board of Directors resolution dated July 31, 1936, approving an amendment to an agreement between the Meigs County Electric Membership Corporation and TVA, a copy of which is attached to the exhibit [omitted].....	3106	3458
603—TVA Board of Directors resolution dated August 11, 1936, approving a contract between TVA and Cullman County Electric Membership Corporation dated August 4, 1936, a copy of which is attached thereto	3106	3458
604—TVA Board of Directors resolution dated August 21, 1936, approving a sale and loan agreement between TVA and Gibson County Electric Membership Corporation dated August 13, 1936, a copy of which is attached thereto.....	3106	3458
605—TVA Board of Directors resolution dated September 5, 1936, approving an agreement for sale between TVA and Pickwick Electric Membership Corporation dated August 26, 1936, a copy of which is attached thereto [omitted].....	3106	3458
606—TVA Board of Directors resolution dated September 5, 1936, approving a supplementary contract between TVA and Milan, Tenn., dated May 25, 1936, a copy of which is attached thereto [omitted].	3107	3459
607—TVA Board of Directors resolution dated September 5, 1936, approving a contract for the sale of properties between TVA and the city of Athens, Alabama, dated October 9, 1936, a copy of which is attached thereto [omitted].....	3107	3459

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
608—TVA Board of Directors resolution dated December 23, 1936, approving a contract between TVA and Southwest Tennessee Electric Membership Corporation dated December 9, 1936, a copy of which is attached thereto [omitted].....	3107	3459
609—TVA Board of Directors resolution dated December 23, 1936, approving a contract between TVA and Duck River Electric Membership Corporation dated October 31, 1936, a copy of which is attached thereto [omitted].....	3107	3459
610—TVA Board of Directors resolution dated January 8, 1937, approving a contract between TVA and Lincoln County Electric Membership Corporation, a copy of which is attached thereto [omitted]....	3108	3459
611—TVA Board of Directors resolution dated February 11, 1937, approving a so-called emergency operation contract between TVA and Tishomingo County Electric Power Association dated January 28, 1937, a copy of which is attached thereto [omitted]	3108	3460
612—TVA Board of Directors resolution dated February 11, 1937, approving a supplementary contract between TVA and Holly Springs, Mississippi, dated February 2, 1937, a copy of which is attached thereto	3108	3460
613—TVA Board of Directors resolution dated March 10, 1937, approving a contract between TVA and Dayton, Tennessee, dated March 17, 1937, a copy of which is attached thereto [omitted].....	3108	3460
614—TVA Board of Directors resolution dated March 31, 1937, approving a contract entitled "Emergency Operation Contract between TVA and Alcorn County Electric Power Association," dated April 1, 1937, a copy of which is attached thereto [omitted]	3108	3460
615—TVA Board of Directors resolution dated April 9, 1937, approving the transfer of certain franchises from TVA to the Southwest Tennessee Electric Membership Corporation [omitted].....	3108	3460

INDEX

xlvii

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
616—TVA Board of Directors resolution dated April 9, 1937, approving a supplementary contract between TVA and Okolona, Miss., dated March 24, 1937, a copy of which is attached thereto	3109	3461
617—TVA Board of Directors resolution dated June 3, 1937, authorizing the construction of 110 kv. transmission line between Norris Dam and Volunteer Portland Cement Company [omitted]	3109	3461
618—TVA Board of Directors resolution dated June 3, 1937, approving a contract between TVA and Bolivar, Tenn., dated March 20, 1937, a copy of which is attached thereto	3109	3461
619—TVA Board of Directors resolution dated June 9, 1937, approving a contract with the Electric Power Board of Chattanooga, Tenn. [omitted]	3114	3466
620—TVA Board of Directors resolution dated June 23, 1937, approving an "Emergency Operation Contract between TVA and Dickson, Tennessee", dated June 11, 1937, a copy of which is attached thereto [omitted]	3114	3467
621—TVA Board of Directors resolution dated July 12, 1937, granting an extension of time to the Monroe County Electric Power Association for the first payment of principal on its indebtedness to the TVA	3114	3467
622—TVA Board of Directors resolution dated July 20, 1937, approving a supplementary contract between TVA and Athens, Alabama, dated July 23, 1937, a copy of which is attached thereto.....	3115	3468
623—TVA Board of Directors resolution dated July 29, 1937, approving a contract entitled "Emergency Operation Contract between TVA and Pickwick Electric Membership Corporation" dated July 14, 1937, a copy of which is attached thereto [omitted]	3117	3471
624—TVA Board of Directors resolution dated July 29, 1937, approving a contract between TVA and Joe Wheeler Electric Membership Corporation for the sale and construction of rural lines dated May 14, 1937, a copy of which is attached thereto	3118	3471

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
625—TVA Board of Directors resolution dated August 13, 1937, approving the sending of a letter by Mr. Lillenthal to Mr. Dempster, city manager, of Knoxville, Tenn., a copy of which letter is attached thereto	3118	3472
626—TVA Board of Directors resolution dated August 13, 1937, approving a supplementary contract between TVA and Lincoln County Electric Membership Corporation for the collection of bills and other services dated June 29, 1937, a copy of which is attached thereto [omitted]....	3122	3476
627—TVA Board of Directors resolution dated September 24, 1937, unanimously approving a schedule of generating installations at the various dam projects.....	3122	3476
628—Telegram dated May 13, 1936, from Edgar M. Queeny of the Monsanto Chemical Company to Wendell Willkie.....	3123	3477
629—A chart of the soundings made in the upper regions of the pool above Mitchell Dam and a study of the approach channel and locks at the head of that reservoir	3124	3478
630—A table showing the cost to the Alabama Power Company of the facilities devoted solely to navigation on the Alabama, Coosa and Tallapoosa river systems....	3125	3479
631—Excerpts from the application of the Alabama Power Company for a license for Jordon Dam	3126	3479

VOLUME VI.

632—A table showing the payments from 1921 to 1936 inclusive made to the United States by the Alabama Power Company on account of the licenses issued by the Federal Power Commission to that company	3139	3487
633—Press release dated August 25, 1933, entitled "Power Policy of the Tennessee Valley Authority"	3140	3487
634—Press release dated September 14, 1933 announcing the TVA rates.....	3142	3490
635—A magazine article dated August 14, 1937, entitled "The Tennessee Valley Looks to the Future"	3144	3493

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
636—(This exhibit was withdrawn by agreement of counsel when counsel for Defendants permitted the desired data to be read into the record).....	3160	3509
637—PWA press release No. 44.....	3161	3509
638—PWA press release No. 468 [omitted]....	3164	3510
639—PWA press release No. 709.....	3165	3511
640—PWA press release No. 868 [omitted].....	3167	3512
641—PWA press release No. 989.....	3168	3512
642—PWA press release No. 1165.....	3172	3514
643—PWA press release No. 1396.....	3176	3516
644—Letter dated November 8, 1933, signed by H. M. Waite, deputy administrator....	3178	3517
645—President's letter creating the National Power Policy Committee.....	3180	3518
646—PWA press release [omitted in printing]	3183	
647—"Power Views of Franklin D. Roosevelt"...	3209	3520
648—Press release of EHFA dated May 20, 1935	3260	3550
649—Contract between TVA and EHFA (first three pages only offered in evidence)..	3266	3554
650—EHFA circular, March, 1937, re plan for financing retail purchase of electrical appliances	3269	3555
651—EHFA circular, May, 1936, re plan for financing retail purchase of electrical appliances	3272	3559
652—EHFA circular [omitted].....	3273	3559
653—EHFA circular re time payment plan....	3274	3559
654—EHFA circular, dated April, 1935, re plan for financing retail purchase of electrical appliances	3282	3564
655—EHFA circular	3283	3564
656—EHFA circular listing the territories where EHFA service was available....	3286	3568
657-680 Incl.—Correspondence and memoranda between TVA and EHFA.....	3290	3571
681—EHFA Press Release dated May 26, 1934.		
682—List as of June 30, 1937 giving the locations and numbers of dealers for which TVA collects	3338	3598
683—REA Press Release, dated August 7, 1936 [omitted]	3339	3599
684—Letter dated July 2, 1935 to George W. Kable from Harry L. Brown re North Georgia Electric Membership Corporation	3340	3599

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
685—Letter dated April 28, 1936 to REA from North Georgia Electric Membership Corporation over the signature of R. C. Pittman to REA	3342	3600
686—Message of the Governor of Tennessee to the Legislature, January 22, 1935.....	3350	3605
687—Message of the Governor of Tennessee to the Legislature, April 8, 1935.....	3356	3609
688—Charter issued by the State of Tennessee to the Middle Tennessee Electric Membership Corporation [omitted].....	3365	3618
689—A Subpoena Duces Tecum for the books and records of TVA showing the number of employees in the Department of Electricity as of October 1, 1937, etc.....	3366	3618
690—A Subpoena Duces Tecum for a copy of the letter, dated on or about October 15, 1934, from TVA (Lillenthal) to Mayor Overton of Memphis.....	3367	3618
691—A Subpoena Duces Tecum for various letters of TVA beginning with a letter dated on or about March 27, 1934, from TVA or Mr. Lillenthal to the President of the United States or Federal Trade Commission	3368	3619
692—A Subpoena Duces Tecum for various letters and telegrams passing between Senator Black of Alabama and TVA.....	3369	3620
693—A Subpoena Duces Tecum for all letters and telegrams between TVA and REA from and after May 11, 1935.....	3370	3621
694—A Subpoena Duces Tecum for a press release dated on or about September 7 or 8, 1937, and a copy of speech given by David Lillenthal on or about November 17, 1933	3371	3621
695—A Subpoena Duces Tecum requesting various letters and circular letters issued by TVA beginning with a circular letter dated on or about September 21, 1936, from B. S. Robinson of TVA entitled "Another Electrical Fair for your Benefit"	3372	3622
696—A Subpoena Duces Tecum for various letters and telegrams passing between TVA and the North Alabama cities and PWA officials beginning with a letter dated on or about October 16, 1933, from Harry Berry to TVA or Director Lillenthal..	3374	3623

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
697—A Subpoena Duces Tecum for three letters beginning with a letter dated on or about October 5, 1934, from PWA signed by Henry T. Hunt to TVA or Lillenthal..	3376	3625
698—A resolution of the TVA Board of Directors, dated August 21, 1936, concerning pool level elevations at Chickamauga Dam	3377	3626
699—A resolution of the TVA Board of Directors, dated November 18, 1933, authorizing Mr. Lillenthal to continue co-operation with the manufacturers of electrical appliances	3377	3627
700—Tennessee Valley Authority five-year program condensed statement.....	3378	3628
701—Excerpt from TVA Minutes, dated June 26, 1933.....	3379	3629
702—Excerpt from TVA Minutes, dated July 11, 1933	3380	3629
703—Excerpt from TVA Minutes, dated July 30, 1933	3382	3630
704—Excerpt from TVA Minutes, dated August 5, 1933	3385	3631
705—Excerpt from TVA Minutes, dated September 18, 1933.....	3386	3632
706—Excerpt from TVA Minutes, dated September 21, 1933.....	3388	3632
707—Excerpt from TVA Minutes, dated September 29, 1933.....	3390	3636
708—Excerpt from TVA Minutes, dated October 13, 1933.....	3398	3637
709—Excerpt from TVA Minutes, dated October 14, 1933.....	3412	3644
710—Excerpt from TVA Minutes, dated October 24, 1933.....	3413	3644
711—Excerpt from TVA Minutes, dated October 24, 1933	3416	3645
712—Excerpt from TVA Minutes, dated November 27, 1933.....	3419	3647
713—Excerpt from TVA Minutes, dated December 16, 1933	3422	3648
714—Excerpt from TVA Minutes, dated January 19, 1934.....	3423	3648
715—Excerpt from TVA Minutes, dated March 30, 1934	3424	3649
716—Excerpt from TVA Minutes, dated April 13, 1934	3431	3652
717—Excerpt from TVA Minutes, dated June 30, 1934	3435	3653

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
718—Excerpt from TVA Minutes, dated July 17, 1934	3438	3655
719—Excerpt from TVA Minutes, dated August 7, 1934	3439	3655
720—Excerpt from TVA Minutes, dated September 18, 1934.....	3441	3656
721—Copy of letter from Arthur E. Morgan, Chairman of the TVA Board of Directors to President Roosevelt, dated May 10, 1934	3442	3656
722-769 inclusive—(These numbers were inadvertently given by the reporter to press releases in the Ashwander Case which are given other exhibit numbers in this case. There are, therefore, no physical exhibits bearing these numbers.).....	3449	3659
770—Synopsis of letter from Henry T. Hunt of PWA to David Lillienthal and letter in reply thereto from Mr. Lillienthal to Mr. Hunt dated November 22, 1934.....	3450	3659
771—Copy of telegram dated June 19, 1934, from Mayor Farr of Tusculumbia to David Lillienthal	3453	3661
772—Telegram dated June 20, 1934, from David Lillienthal to Mayor Farr.....	3454	3661
773—Correspondence between PWA and TVA re allotment to Hartselle, Alabama....	3456	3662
774—Budgetary statement—"Estimate of appropriations fiscal year ending June 30, 1936" and the justification thereof.....	3457	3663
775—TVA answers to certain interrogations respective to its corporate functions.....	3464	3666
776—Stipulation as to the testimony of Harold L. Ickes	3466	3667
777—Opinion of PWA Electric Power Board of Review re Decatur, Alabama.....	3469	3668
778—Order of the Power Administrator establishing the Electric Power Board of Review	3478	3673
779—TVA Press Release, dated August 22, 1933. Opposition before Federal Power Commission to application by private companies for license	3480	3673
780—TVA Press Release, dated July 24, 1933. Llewellyn Evans sent to Muscle Shoals area	3481	3674
781—TVA Press Release, dated July 31, 1933. Preparation of plans for transmission line	3483	3675

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
782—TVA Press Release, dated August 1, 1933. Naming of Norris Dam.....	3484	3675
783—TVA Press Release, dated August 10, 1933. Division of duties among directors....	3485	3676
784—TVA Press Release, dated August 24, 1933. Applications from cities	3488	3677
785—TVA Press Release, dated August 30, 1933. Transmission line surveys start.....	3489	3678
786—TVA Press Release, dated August 31, 1933. A. E. Morgan address before Kiwanis Club of Knoxville	3490	3679
787—TVA Press Release, dated September 2, 1933. Transfer of Muscle Shoals proper- ties to TVA	3491	3679
788—TVA Press Release, dated September 5, 1933. Application from municipalities..	3492	3679
789—TVA Press Release, dated September 22, 1933. Conditions for construction of Wheeler Dam	3494	3680
790—TVA Press Release, dated September 28, 1933. D. E. Lilienthal address before Rotary Club of Chattanooga	3496	3681
791—TVA Press Release, dated October 9, 1933. Bids on Transmission line equipment..	3502	3684
792—TVA Press Release, dated October 11, 1933. Announcement of A. E. Morgan broad- cast	3504	3685
793—TVA Press Release, dated October 12, 1933. Text of A. E. Morgan broadcast..	3505	3686
794—TVA Press Release, dated October 13, 1933. Lilienthal's statement re local elections	3508	3687
795—TVA Press Release, dated October 15, 1933. CCC cooperation with TVA.....	3509	3688
796—TVA Press Release, dated October 17, 1933. Lilienthal address before Rotary Club of Memphis	3511	3689
797—TVA Press Release, Dated October 20, 1933. A. E. Morgan address to Chamber of Commerce of Asheville, N. C.....	3518	3693
798—TVA Press Release, dated November 4, 1933. Awarding contract for Transmis- sion line equipment	3523	3695
799—TVA Press Release, dated November 7, 1933. Lilienthal address before Rotary, Chamber of Commerce and Exchange Clubs of Nashville	3525	3696
800—TVA Press Release, dated November 11, 1933. Lilienthal address before Law- yers Club, Atlanta, Georgia.....	3536	3702

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
801—TVA Press Release, dated November 15, 1933. Terms and conditions for retail sales of electricity by municipalities...	3548	3709
802—TVA Press Release, dated November 19, 1933. A. E. Morgan statement re importance of electric power.....	3553	3712
803—TVA Press Release, dated November 21, 1933. A. E. Morgan address to National Academy of Sciences, Boston, Mass....	3555	3713
804—TVA Press Release, dated November 22, 1933. Sheffield, Alabama, contract for TVA power	3561	3716
805—TVA Press Release, dated December 3, 1933. CWA cooperation with TVA....	3563	3717
806—TVA Press Release, dated December 3, 1933. A. E. Morgan address to American Institute of Electrical Engineers, New York City.....	3564	3718
807—TVA Press Release, dated December 12, 1933. CWA cooperation with TVA....	3572	3722
808—TVA Press Release, dated December 18, 1933. TVA to develop Aurora project on Tennessee River.....	3574	3723
809—TVA Press Release, dated December 20, 1933. Construction of lines and CWA cooperation	3576	3724
810—TVA Press Release, dated December 20, 1933. Announcement of creation of Electric Home and Farm Authority, Inc.	3578	3725
811—TVA Press Release, dated December 20, 1933. Announcement of creation and purposes of Electric Home and Farm Authority, Inc.	3580	3726
812—TVA Press Release, dated December 28, 1933. Announcement of proposed organization of farm cooperatives.....	3582	3727
813—TVA Press Release, dated January 3, 1934. Announcement of agreement with C. & S.....	3583	3728
814—TVA Press Release, dated January 5, 1934. Supplemental statement re agreement TVA-C. & S.....	3587	3730
815—TVA Press Release, dated January 6, 1934. Lillenthal address before American Academy of Political & Social Science, Philadelphia	3590	3731
816—TVA Press Release, dated January 20, 1934. Organization of EHFA perfected.	3598	3735

INDEX

lv

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
817—TVA Press Release, dated January 20, 1934. Lillenthal address broadcast....	3601	3737
818—TVA Press Release, dated January 26, 1934. TVA service to Tupelo.....	3610	3742
819—TVA Press Release, dated March 3, 1934. Conferences, City of Knoxville, TVA and Tennessee Public Service Company representatives	3612	3743
820—TVA Press Release, dated March 13, 1934. EHFA activities	3614	3744
821—TVA Press Release, dated March 21, 1934. TVA contracts with nine cities.....	3618	3746
822—TVA Press Release, dated March 25, 1934. Mosquito control on power reservoirs..	3619	3747
823—TVA—Press Release, dated March 26, 1934. EHFA activities with electric appliance manufacturers	3620	3747
824—TVA Press Release, dated March 28, 1934. Chattanooga as headquarters of EHFA.	3622	3749
825—TVA Press Release, dated April 5, 1934. Personnel of EHFA.....	3624	3750
826—TVA Press Release, dated April 6, 1934. Organization of County cooperatives in Mississippi and Alabama.....	3626	3751
827—TVA Press Release, dated April 6, 1934. Announcement of sale and demonstration by EHFA at Tupelo.....	3629	3752
828—TVA Press Release, dated April 7, 1934. EHFA offices at Chattanooga.....	3632	3753
829—TVA Press Release, dated April 9, 1934. EHFA activities	3634	3755
830—TVA Press Release, dated April 10, 1934. EHFA appliance prices.....	3636	3756
831—TVA Press Release, dated April 10, 1934. Announcement of plan of county cooperatives	3639	3758
832—TVA Press Release, dated April 16, 1934. EHFA and TVA emblem.....	3641	3759
833—TVA Press Release, dated April 17, 1934. TVA emblem and announcement of purpose	3645	3761
834—TVA Press Release, dated April 22, 1934. Lillenthal address before Tennessee Valley Institute of University of Chattanooga	3647	3762
835—TVA Press Release, dated April 22, 1934. EHFA omces and display rooms at Chattanooga	3659	3768

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
836—TVA Press Release, dated April 23, 1934. Announcement of TVA contract with advertising agency	3661	3768
837—TVA Press Release, dated April 25, 1934. EHFA electric home specialists.....	3663	3770
838—TVA Press Release, dated April 25, 1934. Electrical home	3664	3770
839—TVA Press Release, dated April 25, 1934. Lillenthal address before League of Women Voters, Boston, Mass.....	3665	3771
840—TVA Press Release, dated April 25, 1934. Origin of TVA emblem.....	3664	3781
841—TVA Press Release, dated April 26, 1934. EHFA demonstration at Tupelo.....	3686	3782
842—TVA Press Release, dated May 16, 1934. A. E. Morgan address before the Lower Tennessee Valley Association.....	3689	3783
843—TVA Press Release, dated May 17, 1934. Lillenthal address before the National Association of Mutual Savings Banks, New York	3699	3788
844—TVA Press Release, dated May 18, 1934. A. E. Morgan address to the Civic Clubs of Huntsville, Alabama.....	3713	3796
845—TVA Press Release, dated May 18, 1934. The first year of the TVA.....	3724	3801
846—TVA Press Release, dated May 21, 1934. Broadcast of Directors.....	3727	3803
847—TVA Press Release, dated January 22, 1936. Lillenthal address to National Retail Dry Goods Association, Annual Convention, New York.....	3731	3805
848—TVA Press Release, dated December 30, 1935. Lillenthal address at meeting of American Historical Association and American Political Science Association, Chattanooga	3733	3806
849—TVA Press Release, dated April 10, 1936. Announcement of expansion of lines— PWA loan to Okolona.....	3738	3809
850—TVA Press Release, dated April 13, 1936. Announcement of construction of rural lines	3739	3809
851—TVA Press Release, dated April 18, 1936. Announcement of construction of rural lines	3740	3810
852—TVA Press Release, dated July 23, 1936. Announcement of contract with Alumi- num Company of America.....	3741	3810

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
853—TVA Press Release, dated August 7, 1936. Lillenthal attending meeting of Third World Power Conference.....	3743	3811
854—TVA Press Release, dated August 19, 1936. Announcement of contract with Volun- teer Portland Cement Company.....	3745	3812
855—TVA Press Release, dated August 28, 1936. Cullman County Electric Fair.....	3746	3812
856—TVA Press Release. Announcement of con- struction of rural lines.....	3748	3813
857—TVA Press Release, dated October 1, 1936. Norris Dam generators in operation....	3749	3814
858—TVA Press Release, dated October 12, 1936. Athens, Alabama, county-wide distribu- tion	3750	3814
859—TVA Press Release, dated October 17, 1936. Wm. I. Nichols, address before Public Ownership League of America, Spring- field, Ill.	3753	3815
860—TVA Press Release, dated November 16, 1936. A. E. Morgan address before U. S. Conference of Mayors, Washington, D. C.	3756	3817
861—TVA Press Release, dated March 23, 1937. A. E. Morgan address before Annual Conference of Schoolmens' Week, Uni- versity of Minnesota.....	3759	3818
862—TVA Press Release, dated November 28, 1935. Publication of telegram and TVA letter re construction of rural lines by companies	3763	3820
863—TVA Press Release, dated May 30, 1934. A. E. Morgan address before the Central States Forestry Congress.....	3774	3826
864—TVA Press Release, dated June 1, 1934. Payment to Mississippi Power Company for property transferred.....	3781	3830
865—TVA Press Release, dated June 3, 1934. Contract with Alcorn County Electric Power Association	3782	3830
866—TVA Press Release, dated June 12, 1934. EHFA combined appliances.....	3788	3834
867—TVA Press Release, dated June 13, 1934. Release of correspondence with National Power & Light Company re Knoxville purchase	3790	3834
868—TVA Press Release, dated June 22, 1934. Lillenthal address at Jackson, Tennes- see, to civic leaders.....	3820	3850

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
869—TVA Press Release, dated June 23, 1934. Receipt of offer for sale of Alabama properties	3824	3852
870—TVA Press Release, dated July 1, 1934. Statement of Carl A. Bock re dams....	3825	3853
871—TVA Press Release, dated July 6, 1934. Announcement of plan for purchase of North Alabama properties and exposi- tion of methods whereby towns may ob- tain TVA electricity.....	3828	3854
872—TVA Press Release, dated July 14, 1934. Statement of Carl A. Bock re construc- tion of dam near Asheville, N. C.....	3830	3856
873—TVA Press Release, dated July 15, 1934. Announcement of reduced bills through TVA power at Athens, Alabama.....	3831	3856
874—TVA Press Release, dated July 15, 1934. Announcement of exercise of option from Alabama Power Company re North Alabama towns	3832	3856
875—TVA Press Release, dated July 17, 1934. Announcement of agreement to acquire property of Tennessee Public Service Company at Knoxville.....	3834	3857
876—TVA Press Release, dated July 18, 1934. Savings which will result from purchase of Tennessee Public Service Company property	3842	3861
877—TVA Press Release, dated July 18, 1934. A. E. Morgan announcement re coal in- dustry	3845	3863
878—TVA Press Release, dated July 27, 1934. Announcement of execution of contract for purchase of Tennessee Public Ser- vice Company properties.....	3847	3864
879—TVA Press Release, dated August 1, 1934. John B. Blandford, Jr., broadcast....	3852	3867
880—TVA Press Release, dated August 7, 1934. Lillenthal and Llewellyn Evans study English Grid System.....	3857	3869
881—TVA Press Release, dated August 27, 1934. List of towns applying or making in- quiries for power.....	3860	3871
882—TVA Press Release, dated October 1, 1934. Visit of Power Authority of State of New York to TVA.....	3864	3873

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
883—TVA Press Release, dated October 2, 1934. A. E. Morgan address before the Technical Club of Madison and Milwaukee Engineering Club	3867	3874
884—TVA Press Release, dated October 6, 1934. Statement filed by the TVA with the Alabama Public Service Commission...	3874	3878
885—TVA Press Release, dated October 8, 1934. Service to rural lines in Lauderdale County, Alabama	3886	3884
886—TVA Press Release, dated October 9, 1934. Statement by Lillenthal upon conclusion of visit of trustees of New York Power Authority	3888	3886
887—TVA Press Release, dated October 22, 1934. E. S. Draper, address at National Conference on City Planning and American Civic Association, St. Louis, Mo.....	3889	3886
888—TVA Press Release, dated November 7, 1934. Statement issued on first anniversary of Norris Dam construction.....	3894	3889
889—TVA Press Release, dated October 26, 1934. A. E. Morgan's transactions with coal associations	3896	3889
890—TVA Press Release, dated November 19, 1934. Arrangement for valuation of private utilities' property at Aurora Dam site	3900	3892
891—TVA Press Release, dated December 17, 1934. A. E. Morgan address at Wharton School, University of Pennsylvania....	3903	3893
892—TVA Press Release, dated November 5, 1934. A. E. Morgan address before the Democratic Women's Luncheon Club at Philadelphia	3909	3896
893—TVA Press Release, dated January 16, 1935. Announcement TVA will open office in Birmingham on January 18th...	3917	3900
894—TVA Press Release, dated May 13, 1935. A. E. Morgan address before Rotary Club of Columbus, Ohio.....	3918	3901
895—TVA Press Release, dated July 31, 1935. A. E. Morgan address before Chattanooga Flood Protection District Commission, at Chamber of Commerce, Chattanooga	3921	3903
896—TVA Press Release, dated September 22, 1935. Announcement of celebration at Fayetteville, Tennessee	3935	3910

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
897—TVA Press Release, dated October 1, 1935. Lillenthal address at Fayetteville on opening of farm lines in Lincoln County, Tennessee	3938	3911
898—TVA Press Release, dated October 21, 1935. Sixth Rural Cooperative launched	3945	3915
899—TVA Press Release, dated October 24, 1935. Lillenthal address at Dickson, Tennessee	3947	3916
900—TVA Press Release, dated November 2, 1935. TVA transmission loop in West Tennessee	3954	3920
901—TVA Press Release, dated November 26, 1935. Lillenthal address before meet- ing under auspices of City of Louisville, Kentucky	3956	3921
902—TVA Press Release, dated July 29, 1936. Morgan address before TVA employees at Knoxville	3963	3924
903—A map of the Gilbertsville pool at eleva- tion 370 [omitted]	3965	3925
904—"Figure 3. Capacity Curve for Norris Res- ervoir with Controlling Elevations" taken from article by James S. Bowman in "Civil Engineering", April, 1935 (orig- inal exhibit)	3966	3925
905—"Figure 2. Storage Required for Various Regulated Flows at Florence, Alabama" taken from article by James S. Bowman in "Civil Engineering" for April, 1935 (original exhibit)	3966	3925
906—A photograph of the plaque on the Miami Conservancy dams, stating that the use of the dams for power development would be a menace to the cities below [omitted]	3966a	5926
907—A hydrograph of elevation of Norris Reser- voir during 1936 and 1937 (original ex- hibit) [omitted]	3967	3929
908—A Resolution of the Board of Directors of TVA dated July 1, 1936, creating a Com- mittee on Water Control Operations...	3968	3929
909—A chart from page 515 of Complainants' Exhibit 115 (Hearings on Second De- ficiency Appropriations Bill, 1937) show- ing TVA system demand generator in- stallations and firm power capacity, actual and projected to the end of 1940 (original exhibit) [omitted]	3969	3929

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
910—Daily reports of releases of water at Norris Dam [omitted].....	3970	3929
910-A—A water control bulletin dated December 19, 1936, concerning the operation of Wheeler reservoir	3971	3930
910-B—A sheet of statistics concerning river stages and rainfall for the date February 9, 1937.....	3972	3930
911—Daily reports of releases of water at Norris Dam [omitted]	3973	3931
912—Defendants' Exhibit 29 in the Ashwander case, showing Norris Dam and the amount of dead storage available there and the amount available for flood control (original exhibit) [omitted].....	3974	3931
913—Plate 19 from Volume 2 of House Document 328, which is a graph of floods on the Tennessee River (original exhibit) [omitted]	3975	3931
914—Defendants' Exhibit 30 in the Ashwander case, which is a sketch showing surcharge storage provided to compensate for flood storage displaced by a reservoir (original exhibit) [omitted].....	3975	3931
915—Defendants' Exhibit 31 in the Ashwander case, which is a graph of the Tennessee River showing channel storage below Knoxville (original exhibit) [omitted].	3975	3931
916—A table based upon the daily river bulletins of TVA, identified as Complainants' Exhibit 910, showing the discharge below Norris Dam in August, September and October, 1936.....	3976	3932
917—A list of the dams proposed in C. T. Barker's substitute navigation scheme.....	3977	3933
918—The TVA Neighborhood Plan.....	3978	3934
919—Operating statistics of TVA for the month of August, 1937.....	3990	3946
920—A table showing the farm census data for Alabama as of January 1, 1935.....	3997	3953
921—A table prepared by the Statistical Department of the Edison Electric Institute stating certain figures concerning rural electrification in the United States	3998	3954
922—A letter dated January 8, 1938, to the Alabama Power Company from the Rockwood Alabama Stone Company [omitted]	3999	3955

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
923—Water control bulletins Nos. 1 to 9 inclusive	4000	3955
924—Papers designated as water control memorandum Nos. 1 to 24 inclusive, the first one being dated July 27, 1937, and the last one being dated December 31, 1937	4007	3961
925—Map prepared by the Tennessee Valley Authority Project Planning Division entitled "Tennessee River Plan and Profile Existing and Proposed High Dams" (original exhibit) [omitted]	4019	3973
926—Table entitled "Tennessee Valley Authority Tabulation of Principal Features of Present and Proposed Dam and Reservoir Projects September 29, 1937"....	4020	3974
927—Chart entitled "Tennessee Valley Authority Proposed Program of Dam Construction"	4021	3974
928—The original power contract between TVA and the City of Florence, dated March 12, 1934	4022	3975
929—The original power contract between TVA and the City of Tusculumbia, dated March 14, 1934	4029	3980
930—The original power contract between TVA and the City of Sheffield, dated March 14, 1934	4030	3981
931—Subpoena duces tecum for report of United States Department of the Interior, Bureau of Reclamation, entitled, "Economic Height of Norris Dam," by E. B. Debler, Hydraulic Engineer, dated November 1, 1933	4031	3982
932—Table entitled "Comparative Lockage Times per Lock (no allowance for open river navigation)"	4032	3982
933—A diagram entitled "Coal Transfer and Transit Facilities" at Norris Dam (original exhibit) [omitted].....	4033	3983
934—A table showing the gross hydro plant generation in-kwh- of the Alabama Power Company at Lay Dam, Mitchell Dam, Jordan Dam, Martin Dam, Upper Tallassee Dam and Thurlow Dam for the years 1932 to 1936.....	4034	3984
935—A table entitled "Comparative Lockage Times—Tennessee River"	4035	3984
936—House Document 306, 74th Congress, First Session (original exhibit) [omitted]...	4036	3985

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Complainants' Exhibits Nos.—Continued.

	Original	Print
937—Four sheets showing the proposed subscribers on Highway No. 15 near Fayetteville, Tennessee, and the amount subscribed by each.....	4037	3986
938—A report labeled "Memorandum Covering Proposed Electric Service to Elora, Tennessee, Flintville, Tennessee, U. S. Government Fish Hatchery in Warren Hollow, Kelso, Tennessee.....	4041	3987
939—A letter dated November 10, 1932, to Mr. Joe C. Guild, Jr., from Malcolm R. Williams enclosing a letter to Mr. Williams dated September 27, 1932, from Charlie Beatty	4045	3901
940—A report of the district engineer entitled "Memorandum as to the feasibility of extending a 2300 volt single phase line from Fayetteville to serve the communities of Kelso, Flintville and the U. S. Government Fish Hatchery".....	4047	3993
941—A tabulation of floods which have occurred between April 15 and November 30 on rivers in and near the Tennessee River basin	4048	3994
942—A table and a chart showing the weekly loads of the Complainant Companies for the year 1937.....	4050	3996
943-953, Inc.—Certificates of Incorporation of Mississippi Rural Cooperative Organizations	4051	3998
954—A subpoena duces tecum for material on pages 7, 8, 9, 10, 11, 14, 15, 30, 31 and 32, submitted to Congress by TVA in December, 1937	4058	4002
955—A subpoena duces tecum for TVA's detail statement of budget estimates for the fiscal year ending June 30, 1939, submitted to Congress in December, 1937..	4059	4003
956—A subpoena duces tecum for minutes of the board of directors of the TVA approving the recommendations or reports relating to the methods of operating Norris, Wheeler or any other TVA dam or prescribing levels at any of the reservoirs at said dams.....	4060	4004
957—Resolutions of TVA Board of Directors dated October 26, 1936, March 12, 1937, March 31, 1937, May 5, 1937, and June 3, 1937, relating to water control bulletins	4061	4004

VOLUME VII.

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.:

	Original	Print
1—Tabulation of TEP common stock dividends paid for four years ending 1936.	4063	4007
2—Stipulation No. 11, containing operating statistics of certain of complainants...	4064	4007
3—Opinion and order of Tennessee Railroad and Public Utilities Commission re West Tennessee Power & Light Company application for rural line extensions.....	4060	4021
4—Resolution adopted by the Board of Commissioners of Chattanooga, dated October 24, 1933.....	4068	4031
5—Letter dated October 3, 1933, from Mayor Bass of Chattanooga to David E. Lillenthal	4069	4031
6—Letter dated October 9, 1933, from David E. Lillenthal to Mayor Bass of Chattanooga	4060	4032
7—Letter dated October 24, 1933, from Mayor Bass to David E. Lillenthal	4061	4033
8—Letter dated March 19, 1934, from Mayor Bass to David E. Lillenthal.....	4062	4034
9—Letter dated March 26, 1934, from Mayor Bass to V. D. L. Robinson.....	4063	4035
10—Minute entry of the City Council of the city of Knoxville, as same appears of record in Minute Book No. 14, page 315, November 1, 1932.....	4064	4035
11—Minute entry of the City Council of the city of Knoxville, as same appears of record in Minute Book No. 14, page 411, February 21, 1933 [omitted].....	4065	4035
12—Minute entry of the City Council of the city of Knoxville as same appears of record in Minute Book No. 14, page 514, July 11, 1933.....	4066	4036
13—Application for electric service by Yates Bleachery Company, to TEP, dated March 7, 1930.....	4067	4036
14—Letter of April 13, 1937, from TEP to Yates Bleachery Company.....	4069	4037
15—Bill from TEP to Yates Bleachery Company for power service from May 15, to June 21, 1937.....	4100	4038
16—Table giving probable future water traffic on the Tennessee River.....	4101	4038
17—Waiver to be attached to Loan Agreement dated April 2, 1934, between city of Knoxville and United States of America	4102	4039

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
18—Superseding Loan and Grant Agreement between the city of Knoxville, Tennessee, and the United States of America..	4105	4040
19—Amendatory Loan Agreement between the city of Decatur, Alabama, and the United States of America.....	4115	4047
20—Agreement terminating the Loan and Grant Agreement between the city of Decatur and the United States of America.....	4117	4048
21—Application for loan from the city of Decatur, Alabama, to the Federal Emergency Administration of Public Works.	4118	4048
22—Amendatory loan agreement between the city of Tuscumbia, Alabama, and the United States of America.....	4130	4056
23—Agreement dated February 5, 1936, terminating the Loan and Grant Agreement between the city of Tuscumbia, Alabama, and the United States of America	4132	4057
24—Application for loan from the city of Tuscumbia, Alabama, to the Federal Emergency Administration of Public Works.	4133	4058
25—Amendatory Loan Agreement between the city of Sheffield, Alabama, and the United States of America, dated May 29, 1935	4134	4058
26—Agreement dated December 2, 1935, terminating the loan and grant agreement between the city of Sheffield, Alabama, and the United States of America.....	4137	4059
27—Application for loan from city of Sheffield, Alabama, to the Federal Emergency Administration of Public Works.....	4138	4060
28—Resolution of the Board of Directors of TVA rescinding contract dated July 26, 1934, between the Authority and the Tennessee Public Service Company for the sale of electric transmission and distribution properties located in Knox County, Tennessee	4139	4060
29—Resolution of the Board of Directors of TVA rescinding the so-called statement of power policy	4140	4061
30—Chart showing gross waterborne commerce on inland waterways of the United States, 1919-1934 (original exhibit) [omitted]	4141	4062
31—Map of the alluvial valley of the Mississippi River (original exhibit) [omitted]	4141	4062

Received from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
32—House Document 259, 74th Congress, 1st session (original exhibit) [omitted]...	4141	4062
33—Chart entitled, "State of New York, Hudson River Regulating District, Hydrographs of Hudson River at Spier Falls, showing effect of Sacandaga Reservoir in reducing flood of March, 1936" [omitted]	4142	4062
34—Hydrograph of Hudson River at Spier Falls, showing Sacandaga Reservoir regulation for 1936 [omitted].....	4142	4063
35—Hydrograph entitled "State of New York, Hudson River Regulating District, Sacandaga Reservoir Daily Water Surface Elevations, November, 1936" [omitted].	4142	4063
36—Map showing Tennessee River drainage basin (original exhibit) [omitted].....	4143	4063
37—Photograph of scale model of Chickamauga Dam (original exhibit) [omitted].....	4143	4063
38—Chart showing reach of the river between Gilbertsville and Pickwick Landing Dams, location of Gilbertsville Dam, and arrangement of the dam and the relation of the various pool levels (original exhibit) [omitted]	4144	4063
39—Table giving tentative statistics regarding the Gilbertsville project.....	4145	4064
40—Chart entitled, "Tennessee River Dams," showing elevation of Pickwick Landing and Wheeler Dams (original exhibit) [omitted]	4146	4064
41—Resolution of the Board of Directors of Tennessee Valley Authority establishing a Water Control Planning Department.	4147	4065
42—Table showing statistics regarding the Pickwick project	4149	4066
43—Table giving statistics regarding Wheeler project	4150	4067
44—Chart entitled "Tennessee River Dams," showing pool levels of Chickamauga and Guntersville Dams (original exhibit) [omitted]	4151	4067
45—Table giving statistics regarding the Guntersville project	4152	4068
45-A—Table giving revised statistics regarding Guntersville project	4153	4069
46—Table giving statistics regarding the Chickamauga project	4154	4070
46A—Table giving revised statistics regarding Chickamauga project	4155	4071

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
47—Table giving tentative statistics regarding the Watts Bar project.....	4156	4072
48—Table giving tentative statistics regarding the Coulter Shoals project.....	4157	4073
49—Photograph of a perspective of Norris Dam, with sections of masonry removed in order to show sluiceways and penstocks leading to the power unit (original exhibit) [omitted].....	4158	4073
50—Chart entitled "Tributary Dams," showing Norris and Hiwassee storage (original exhibit) [omitted]	4158	4074
51—Table giving statistics regarding the Norris project.....	4159	4074
52—Table giving statistics regarding Hiwassee project	4160	4074
53—Table showing volume of main river pools at various levels	4161	4075
54—Corrected Exhibit 53	4162	4076
55—Map of Chickamauga Reservoir (original exhibit) [omitted]	4163	4076
56—Map of Watts Bar Reservoir (original exhibit) [omitted]	4163	4076
57—Map of Coulter Shoals Reservoir (original exhibit) [omitted]	4163	4077
58—Map of Norris Reservoir (original exhibit) [omitted]	4163	4077
59—Map of Hiwassee Reservoir (original exhibit) [omitted]	4163	4077
60—Map of Gilbertsville Reservoir (original exhibit) [omitted]	4164	4077
61—Map of Pickwick Reservoir (original exhibit) [omitted]	4164	4077
62—Map of Wilson Reservoir (original exhibit) [omitted]	4164	4077
63—Map of Wheeler Reservoir (original exhibit) [omitted]	4164	4077
64—Map of Gunter'sville Reservoir (original exhibit) [omitted]	4164	4078
65—Resolution of the Board of Directors of TVA, dated July 1, 1936, together with water control bulletins Nos. 1 and 2..	4165	4078
66—Map entitled "Tennessee River Basin, Principal Rivers, Railroads, and Highways" (original exhibit) [omitted].....	4167	4079
67—Table giving rainfall and run-off data....	4168	4080
68—Table giving contribution of Clinch and Hiwassee Rivers to Tennessee River floods at Chattanooga.....	4169	4080

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
69—Table showing contributions of tributaries to major Mississippi River floods.....	4170	4061
70—Table showing contribution of the Tennessee River at the crest of the more recent Mississippi River floods.....	4171	4062
71—Chart showing outstanding storms occurrence and paths of great rainfall.....	4172	4062
72—Chart showing Chattanooga as now developed under 1867 flood conditions (original exhibit) [omitted]	4173	4063
73—Chart showing Chattanooga as now developed under 1917 flood conditions (original exhibit) [omitted]	4173	4083
74—Photograph entitled "Chattanooga—view from Lookout Mountain—Flood of March 1917" (original exhibit).....	4173	4084
75—Photograph entitled "Chattanooga—view from Lookout Mountain—November, 1937" (original exhibit).....	4173	4086
76—Photograph of U. S. Highway No. 11, showing high water level flood of 1867 (original exhibit)	4173	4088
77—Photograph showing high water level flood of 1867 at Craven R. R. Yard, etc., west of intersection of Broad and 28th Streets (original exhibit)	4174	4090
78—Photograph showing high water level of 1867 flood at Broad Street and St. Elmo Avenue (original exhibit)	4174	4092
79—Photograph showing high water level of 1867 flood at TEP Company's Carter Street substation (original exhibit)....	4174	4094
80—Photograph showing high water level of 1867 flood at N. C. & St. L. Ry. depot (original exhibit)	4174	4096
81—Chart entitled "Floods—Chattanooga, Tennessee—Types of Property Affected—Five foot intervals of River Stage" (original exhibit) [omitted].....	4174	4097
82—Table showing estimates of reductions in peak discharge and reduction in flood crest at Chattanooga for various systems of reservoirs	4175	4097
83—Chart showing volume in peak of Mississippi River—Hydrograph 1929 flood (original exhibit) [omitted]	4176	4097

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
84—Table showing dates of flood peaks at Johnsonville on the Tennessee River, Paducah on the Ohio River, and Cairo on the Mississippi River for past floods exceeding 50 feet at Cairo.....	4177	4098
85—Table showing Tennessee River flow at Gilbertsville Dam site, flood of January-February, 1937	4178	4098
86—Chart showing effect of natural storage in Gilbertsville Reservoir area in the flood of 1937 (original exhibit) [omitted]....	4179	4099
87—Chart entitled "Elimination of Dead Storage" (original exhibit) [omitted].....	4179	4099
88—Diagram showing divisions of Ohio River drainage basin within which reservoirs have been built or considered (omitted).	4179	4099
89—Chart showing operation of suggested detaining basin system (original exhibit) [omitted]	4179	4099
90—Chart showing comparison between Norris reservoir and Cove Creek reservoir suggested by Fort Kurtz (original exhibit) [omitted]	4179	4099
91—Map entitled "Alluvial Valley of Lower Mississippi River" (original exhibit) [omitted]	4180	4099
92—Map entitled "Tennessee River Drainage Basin" (original exhibit) [omitted]...	4180	4100
93—Chart showing profile of the Tennessee River in its natural unimproved condition (original exhibit) [omitted].....	4180	4100
94—Table headed "Maximum and Minimum Rates of Stream Flow, Tennessee River"	4181	4100
95—Chart and table showing previous projects on the Tennessee River and its tributaries (original exhibit) [omitted]....	4182	4100
96—Chart showing tons of freight moved on the Tennessee River from 1892 to 1936 (original exhibit) [omitted].....	4182	4100
97—Chart entitled "Existing and Proposed Channel Depths before Tennessee Valley Authority Act" (original exhibit) [omitted]	4182	4101
98—Chart entitled "TVA Projects" (original exhibit) [omitted]	4182	4101
99—Photograph of boat passing through the Pickwick lock (original exhibit)	4182	4102
100—Photograph of Wheeler lock, with tow of cement barges in the lock (original exhibit)	4183	4104

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
101—Photograph of lower approach to Gunter-ville lock with N. C. & St. L. car ferry entering the lock (original exhibit)...	4183	4106
102—Chart showing coal transfer and transit facilities of Norris Dam (original exhibit) [omitted]	4183	4107
103—Chart showing coal transfer and transit facilities section and elevation through transit bin and non-overflow section, Norris Dam (original exhibit) [omitted]	4183	4108
104—Chart entitled "Comparison of High-Dam and Low-Dam Plans on Tennessee River" (original exhibit) [omitted].....	4183	4108
105—Table showing time saved in Lockages with TVA high-dam plan as compared to a low-dam plan, assuming same size of locks in each plan.....	4184	4108
106—Graph entitled "Comparison of Velocities in High Dam and Low Dam Pools" (original exhibit) [omitted].....	4185	4108
107—Graph showing relation of horsepower and depth (original exhibit) [omitted].....	4185	4109
108—Table showing percentages of channel distances that are less than twenty feet in depth in the high-dam pools.....	4186	4109
109—Chart showing improvement on tributaries provided by the high-dam plan (original exhibit) [omitted]	4187	4109
110—Chart entitled "Comparison of Pool Fluctuations with High Dams and Low Dams" (original exhibit) [omitted]....	4187	4109
111—Letter dated September 1, 1934 from J. S. Bowman to the District Engineer requesting information concerning the locks which might be required by the War Department for the middle and upper stretches of the Tennessee River.	4188	4110
112—Letter dated September 19, 1934 from Major General E. M. Markham to Dr. A. E. Morgan in answer to Defendants' Exhibit 111.....	4189	4111
113—Chart showing Wheeler Reservoir and surrounding region (original exhibit)....	4194	4112
114—Mimeographed copy of circular issued by the War Department, U. S. Engineer Office, Nashville, Tennessee, December 7, 1936, attaching drawings showing normal limits of Wheeler reservoir and location of the channel which is marked for navigation	4192	4113

INDEX

lxxi

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.	Original	Print
115—Table entitled "Theoretical Efficiencies of the Tennessee River Waterway".....	4211	4133
116—Chart showing Tennessee River and inter-connecting waterways (original exhibit) [omitted]	4212	4133
117—House Document No. 254, 75th Congress, 1st session, entitled "A History of Navigation on the Tennessee River System" [omitted]	4212	4133
118—Chart entitled "Some Industrial and Commercial Centers Reached by Interior Waterway System with Waterway Distance Between Them" (original exhibit) [omitted]	4213	4134
119—Map entitled "Population Concentration along Interior Waterway System" (original exhibit) [omitted].....	4213	4134
120—Chart showing principal crops produced in the Tennessee Valley (original exhibit) [omitted]	4213	4134
121—Chart showing types of forest resources in and around the Tennessee valley (original exhibit) [omitted]	4213	4134
122—Chart entitled "Producing Centers for Some Basic Minerals in the Tennessee Valley" (original exhibit) [omitted]...	4214	4134
123—Map showing traffic-producing regions touched by interior waterway system (original exhibit) [omitted].....	4214	4135
124—Chart entitled "Railroad Freight Origins and Terminations in Tennessee Valley and Contiguous Areas, 1932" (original exhibit) [omitted]	4214	4135
125—Chart showing ton-miles of traffic on the Tennessee River from 1933 to 1936 (original exhibit) [omitted]	4214	4135
126—Tabulation showing estimated tonnage movement on the Tennessee River for 1937, assuming complete navigation facilities	4215	4136
127—Chart entitled "Comparative Unit Function Costs—1932"	4216	4136
128—Table showing ratio of transportation savings by use of the Tennessee River to transportation charges by all-rail routes on tonnages obtained from recent traffic survey	4217	4136

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
129—Table entitled "Railroad Freight Traffic—Southern District"	4218	4136
130—Chart showing tonnage, actual and estimated, moving on Mississippi River system since 1814 (original exhibit) [omitted]	4219	4137
131—Tabulations showing gasoline and kerosene shipments—comparative rates when shipped by rail and by water-truck, etc.	4220	4139
132—Graph headed "Tennessee River Tonnage Graph, Calendar Year 1936" (original exhibit) [omitted]	4230	4140
133—Tabulation showing estimated power requirements of four groups of utility companies	4231	4150
134—Details of computations, study of load forecast and power requirements of four groups of utility companies.....	4232	4151
135—Stipulation as to ownership of complainants' stock and securities.....	4260	4171
136—Stipulation relating to description and tabulation of TVA transmission lines and substations and lines served by TVA	4264	4175
136a—Map showing lines and substations of the TVA in service, under construction, and authorized (original exhibit) [omitted]	4275	4185
136b—Map showing rural lines owned by municipalities and cooperatives purchasing power from TVA and rural lines owned by TVA (original exhibit) [omitted]... ..	4275	4185
137—Map showing lines and substations of TVA and lines and substations purchased or optioned by TVA from C. & S. companies (original exhibit) [omitted]	4275	4185
138—Map showing transmission lines of the TVA and of private utilities (original exhibit) [omitted]	4275	4185
139—Chart entitled "Approximate System Operation Dry Year Like 1925".....	4276	4186
140—Tabulation showing status of TVA generating capacity as of December 31, 1937	4277	4187
141—Tabulation showing successive steps of installation and estimated firm power capacity	4278	4188
142—Tabulation showing water releases at Norris, Wheeler, and Wilson Dams, June 1936 through November 1937—comparisons of total discharges with discharges available for generation.....	4279	4189

INDEX

lxiii

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

	Original	Print
143—Summary of contracts for disposition of power by TVA as of December 15, 1937	4282	4192
143a—Contract of January 4, 1934, between TVA and C. & S.....	4284	4195
143b—Amendment to contract of January 4, 1934, between TVA and C. & S.....	4318	4225
144—Power contract between TVA and Lincoln County Electric Membership Corporation executed December 11, 1937.....	4322	4227
145—Power contract between TVA and Arkansas Power & Light Company dated June 16, 1937	4328	4235
146—Amendatory contract between TVA and Aluminum Company of America dated July 20, 1937.....	4328	4236
147—Twelve tabulations showing analysis of power disposition and use by TVA....	4329	4237
148—Tabulation showing use of Norris and Wheeler Dams for power supplied to C. & S. companies, June through December 1936	4346	4254
149—Tabulation showing hydro system power data, calendar years 1926 through 1937	4347	4255
150—Stipulation regarding purchase of TVA power by C. & S. companies.....	4348	4255
151—Tabulation indicating storage in TVA mainstream projects in acre-feet.....	4357	4263
152—Excerpts from pages 71 to 73 of House Document 328	4358	4263
153—Report of Subcommittee of the Committee on Appropriations on the Independent Offices Appropriation Bill for 1938 (original exhibit) [omitted].....	4361	4265
154—Annual Report of the Tennessee Valley Authority for fiscal year ending June 30, 1937 (original exhibit) [omitted].....	4361	4266
155—Resolution of the Board of Directors of TVA, dated December 20, 1937, authorizing the acquisition of land for Gilbertsville Dam and fixing the maximum pool level thereof.....	4362	4266
156—Resolution of the Board of Directors of TVA, dated December 20, 1937, authorizing and directing the General Manager to write a letter to Congressman Woodrum regarding Gilbertsville Dam.....	4363	4267

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Defendants' Exhibits Nos.—Continued.

Original Print

157—Resolution of the Board of Directors of TVA, dated February 20, 1936, revoking the authority to exercise the option of January 4, 1934, to acquire electrical properties of the TEP Company in the Norr's Dam area	4365	4269
158—Resolution of the Board of Directors of TVA, dated January 25, 1935, rescinding the contract between the Authority and Alabama Power Company, dated August 9, 1934	4366	4270
Appendix "A"—Excerpts read into record by de- fendants from Complainants' Exhibit No. 105....	4368	4371
Appendix "B"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 107.....	4372	4276
Appendix "C"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 108.....	4373	4276
Appendix "D"—Excerpts read into record by de- fendants from Complainants' Exhibit No. 109....	4376	4278
Appendix "E"—Excerpt read into record by defend- ants from Complainants' Exhibit No. 112.....	4379	4282
Appendix "F"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 114.....	4380	4282
Appendix "G"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 115.....	4383	4295
Appendix "H"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 116.....	4408	4315
Appendix "I"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 365.....	4435	4345
Appendix "J"—Excerpts read into record by defend- ants from Complainants' Exhibit No. 366.....	4439	4348

INDEX

lxxv

Record from D. C. U. S., Eastern District of Tennessee—
Continued.

Statement of evidence—Continued.

Original Exhibits contained in volume entitled "Re-
productions of Certain Original Exhibits submitted
by Appellants":

Appellants' Exhibits:

7	199	336	487
12	205	342	488
27	206	343	489
29	207	344	490
33	208	345	491
37	209	346	492
41	210	350	493
45	266	351	494
49	320	352	495
54	321	354	496
74	326	357	907
82	327	358	909
89	329	359	912
98	330	361	913
101	332	362	914
105c	332a	372	915
105d	333a	409	925
182	334	410	933
183	335a	411	942
184			

Appellees' Exhibits:

55	57	60	63
56	58	61	64
	59	62	

Original exhibits contained in volume entitled "Re-
productions of certain Original Exhibits", sub-
mitted by Appellees:

Appellees' Exhibits:

36	81	96	121
37	83	97	122
38	86	98	123
40	87	104	124
44	89	109	125
49	90	110	130
50	91	116	132
66	92	118	136-a
72	93	119	136-b
73	95	120	137
			138

Stipulation as to statement of evidence.....	4442	4350
Order approving statement of evidence.....	4443	4350
Praecipe for transcript of record.....	4444	4351
Clerk's certificate (omitted in printing) ..	4450	
Statement of points to be relied upon.....	4451	4356
Stipulation as to printing record.....	4454	4357

[fol. 1]

[File endorsement omitted]

**IN CHANCERY COURT OF KNOX COUNTY,
TENNESSEE**

THE TENNESSEE ELECTRIC POWER COMPANY, a Maryland Corporation; Franklin Power & Light Company, a Tennessee Corporation; Memphis Power & Light Company, a New Jersey Corporation; Southern Tennessee Power Company, a Delaware Corporation; Birmingham Electric Company, an Alabama Corporation; Mississippi Power Company, a Maine Corporation; Appalachian Electric Power Company, a Virginia Corporation; Georgia Power Company, a Georgia Corporation; Carolina Power & Light Company, a North Carolina Corporation; Tennessee Public Service Company, a Maine Corporation; Holston River Electric Company, a Tennessee Corporation; Alabama Power Company, an Alabama Corporation; Kentucky & West Virginia Power Company, Inc., a Kentucky Corporation; Kingsport Utilities, Incorporated, a Virginia Corporation; Kentucky-Tennessee Light & Power Co., a Kentucky Corporation; West Tennessee Power & Light Company, a Florida Corporation; Mississippi Power & Light Company, a Florida Corporation; East Tennessee Light & Power Company, a Virginia Corporation; Tennessee Eastern Electric Company, a Massachusetts Corporation, Complainants,

VS.

TENNESSEE VALLEY AUTHORITY, a Body Corporate, Created by an Act of Congress Approved May 18, 1933; Arthur E. Morgan, Individually and as an Executive Officer and Director of Tennessee Valley Authority; Harcourt A. Morgan, Individually and as an Executive Officer and Director of Tennessee Valley Authority, and David E. Lilienthal, Individually and as an Executive Officer and Director of Tennessee Valley Authority, Defendants.

[fol. 2] **BILL OF COMPLAINT FOR AN INJUNCTION AND OTHER RELIEF—Filed May 29, 1936; Filed in D. C. U. S., July 15, 1936**

To The Hon. A. E. Mitchell, Chancellor, Holding the Chancery Court at Knoxville, Tennessee:

Complainants, for cause of action against the Defendants, allege:

Parties Complainant

I

Complainant, The Tennessee Electric Power Company, is a corporation organized and existing under the laws of the State of Maryland, is a citizen of said state, is duly qualified to carry on its business in the State of Tennessee and in the State of Georgia, and is a resident of said states, having its principal office and place of business in the City of Chattanooga, Tennessee.

Complainant, Franklin Power & Light Company, is a corporation organized and existing under the laws of the State of Tennessee, is a citizen of said State and has its principal office and place of business in the City of Franklin, Tennessee.

Complainant, Memphis Power & Light Company, is a corporation organized and existing under the laws of the State of New Jersey, is a citizen of said state, is duly qualified to carry on its business in the State of Tennessee, and is a resident of said state, having its principal office and place of business in the City of Memphis, Tennessee.

Complainant, Southern Tennessee Power Company, is a corporation organized and existing under the laws of the State of Delaware, is a citizen of said state, is duly qualified to carry on its business in the states of Alabama and Tennessee and is a resident of said states, having its principal office and place of business in the City of Chattanooga, Tennessee.

Complainant, Birmingham Electric Company, is a corporation organized and existing under the laws of the State [fol. 3] of Alabama, is a resident and citizen of the State of Alabama and has its principal office and corporate domicile in the City of Birmingham, Alabama.

Complainant, Mississippi Power Company, is a corporation organized and existing under the laws of the State of Maine, is a citizen of said state, is duly qualified to carry on its business in the State of Mississippi, and is a resident of said state, having its principal office and place of business in the City of Gulfport, Mississippi.

Complainant, Appalachian Electric Power Company, is a corporation organized and existing under the laws of the State of Virginia, is a resident and citizen of the State of Virginia, is duly qualified to carry on its business in the

States of Virginia and West Virginia, and has its principal office and corporate domicile in the City of Roanoke, Virginia.

Complainant, Georgia Power Company, is a corporation organized and existing under the laws of the State of Georgia, is a resident and citizen of the State of Georgia, and has its principal office and corporate domicile in the City of Atlanta, Georgia.

Complainant, Carolina Power & Light Company, is a corporation organized and existing under the laws of the State of North Carolina, is a resident and citizen of the State of North Carolina, is duly qualified to carry on its business in the States of North Carolina and South Carolina, and has its principal office and corporate domicile in the City of Raleigh, North Carolina.

Complainant, Tennessee Public Service Company, is a corporation organized and existing under the laws of the State of Maine, is a citizen of said state, is duly qualified to carry on its business in the State of Tennessee, and is a resident of said state, having its principal office and place of business in the City of Knoxville, Tennessee.

Complainant, Holston River Electric Company, is a corporation organized and existing under the laws of the State of Tennessee, is a resident and citizen of the State of Tennessee, and has its principal office and corporate domicile in the City of Rogersville, Tennessee.

Complainant, Alabama Power Company, is a corporation organized and existing under the laws of the State of Alabama, is a resident and citizen of the State of Alabama and has its principal office and corporate domicile in the City of Attalla, Alabama.

Complainant, Kentucky & West Virginia Power Company, Inc., is a corporation organized and existing under the laws of the State of Kentucky, is a resident and citizen of the State of Kentucky, and has its principal office and corporate domicile in the City of Ashland, Kentucky.

Complainant, Kingsport Utilities, Incorporated, is a corporation organized and existing under the laws of the State of Virginia, is a citizen of said state, is duly qualified to carry on its business in the State of Tennessee, and is a resident of Tennessee, having its principal office and place of business in the City of Kingsport, Tennessee.

Complainant, Kentucky-Tennessee Light & Power Co., is a corporation organized and existing under the laws of the

State of Kentucky, is a citizen of the State of Kentucky, is duly qualified to carry on its business in the State of Kentucky and in the State of Tennessee, and is a resident of said states, having its principal office and place of business in the City of Bowling Green, Kentucky.

Complainant, West Tennessee Power & Light Company, is a corporation organized and existing under the laws of the State of Florida, is a citizen of said state, is duly qualified to carry on its business in the State of Tennessee, and is a resident of said state, having its principal office and place of business in the City of Jackson, Tennessee.

Complainant, Mississippi Power & Light Company, is a corporation organized and existing under the laws of the State of Florida, is a citizen of said state, is duly qualified to carry on its business in the State of Mississippi, and is a [fol. 5] resident of said state having its principal office and place of business in the City of Jackson, Mississippi.

Complainant, East Tennessee Light & Power Company, is a corporation organized and existing under the laws of the State of Virginia, is a resident and citizen of the State of Virginia, is duly qualified to carry on its business in the States of Virginia, Tennessee, and North Carolina, and has its principal office and corporate domicile in the City of Bristol, Virginia.

Complainant, Tennessee Eastern Electric Company, is a corporation organized and existing under the laws of the State of Massachusetts, is a citizen of said state, is duly qualified to carry on its business in the States of Virginia, Tennessee, and North Carolina, and has its principal office and place of business in the city of Bristol, Tennessee.

Parties Defendant

II

The Defendant, Tennessee Valley Authority (hereinafter sometimes called TVA), is a body corporate created by an Act of Congress approved May 18, 1933 (48 Stat. 58, 16 U. S. C. 831) known as the Tennessee Valley Authority Act of 1933, with the right to sue and be sued. TVA has established and maintains its principal office and place of business in the City of Knoxville, Tennessee, from which it carries on a proprietary business as a public utility for the generation, transmission, distribution and sale of elec-

tric light, heat, and power in the State of Tennessee, Mississippi, Georgia and Alabama, although it has not qualified to do business in any of said States. Said Defendant TVA, as hereinafter more specifically set forth, is exercising and threatening to exercise, and is performing and threatening to continue to perform certain acts pursuant to alleged powers and authority claimed by it to be conferred upon it by said Tennessee Valley Authority Act of 1933, as amended, but which powers and authority are not actually, lawfully or constitutionally conferred upon or vested in it thereby.

[fol. 6] The Defendants, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal, are severally over the age of twenty-one years, citizens of the State of Tennessee and residents of Knoxville, Tennessee. They are the three chief Executive Officers and sole members of the corporate authority of the Tennessee Valley Authority known as its Board of Directors. Under the Tennessee Valley Authority Act of 1933, both prior to and subsequent to the amendment of 1935, said Board of Directors has been and is charged with the duty of directing the exercise of all the powers of the Tennessee Valley Authority. They are sued in their respective individual capacities, and also in their joint and several capacities as officers and directors of, and constituting the governing board of said Tennessee Valley Authority. They, and each of them, are as hereinafter more specifically set forth, exercising and threatening to exercise, and are performing and threatening to continue to perform, certain acts pursuant to alleged powers and authority claimed by them to be conferred upon them and each of them in their aforesaid official capacities under said Tennessee Valley Authority Act of 1933, and amendments thereto, but which powers and authority are not actually, lawfully, or constitutionally, conferred upon or vested in them or in any of them thereby.

Persons Not Joined as Beyond Jurisdiction of Court

III

Harold L. Ickes is the duly appointed, qualified and acting Administrator of the Federal Emergency Administration of Public Works (hereinafter sometimes called PWA), appointed by Executive Order of the President of the

United States of America dated July 8, 1933, in pursuance of the provisions of Section 201(a) of Title of the Act of Congress of June 16, 1933, entitled "National Industrial Recovery Act." He confederated and acted with the Defendants in the performance of some of the acts herein-after charged to be illegal and is a proper but not necessary party. He is not joined as a party Defendant because he is not within the jurisdiction of this Court in that he is a citizen of the State of Illinois, temporarily residing in the District of Columbia.

Capacities in Which Complainants Sue

IV

Complainants have a common interest in the subject of this suit and in obtaining the relief herein sought in that all of them are affected in substantially the same way by the operation of the Tennessee Valley Authority Act and by the acts of the Defendants sought to be justified under that Act. The injuries from which Complainants seek relief are all caused by the operation of said Act and by the same acts of the Defendants hereinafter charged to be illegal. This suit is brought to enjoin the execution of a single unlawful plan on the part of the Defendants directed against the business of the Complainants as a class, not because of any individual characteristics of the various businesses of the Complainants, but because the Complainants are operating as privately owned utilities within certain territory hereinafter more particularly described. The unlawful actions of the Defendants are all parts of a comprehensive plan, which would not be made fully apparent by the partial disclosures of several suits, nor could a series of separate suits show fully the injuries to the Complainants threatened by the consummation of the unlawful plan and action of the Defendants. The promotion of the convenient administration of justice and the prevention of a multiplicity of suits justify and require that Complainants unite their causes of action and join in a single suit.

[fol. 8]

V

Complainants institute and bring this suit each in its several capacities as citizens and property owners lawfully engaged in business and as owners of real and personal

property and franchises, suffering or threatened with irreparable injury to such rights and properties and further as Federal, State, County and municipal taxpayers sustaining special damages and special tax burdens peculiar to them and not sustained by taxpayers generally. Unless the relief prayed for herein is granted, Complainants' said businesses, properties and franchises will be irreparably injured, damaged or destroyed with the result that each Complainant will suffer direct pecuniary loss far in excess of \$3,000 and in many cases amounting to many millions of dollars, all as hereinafter more particularly set forth.

Status of Complainants as Taxpayers

VI

Complainants are each subject to special tax burdens to which taxpayers generally are not subject, including, among others, the tax imposed by Section 616 of the Federal Revenue Act of 1932, as amended, upon electrical energy sold by Complainants for domestic and commercial consumption in an amount equal to 3% of the price for which Complainants sell the same, social security taxes and special taxes for unemployment and relief now imposed by general Revenue Acts but formerly imposed by Sections 211 to 219, inclusive, of the National Industrial Recovery Act for the purpose of obtaining funds to repay monies borrowed by the Federal Government to meet expenditures purported to be authorized by Title II of said Act, or to meet such expenditures directly to the extent that they are not met by borrowed funds. Complainants are also severally subject to and pay large sums in the form of general taxes to the Federal Government.

In addition to the general and special tax burdens hereinabove set forth, Complainants and each of them are sub-[fol. 9] ject to special and general taxes levied upon privately owned electric utilities by the several States and their political subdivisions and annually pay large sums in the form of special and general taxes so levied on privately owned electric utilities to the several States and political subdivisions in which Complainants severally carry on business or own property. Complainants annually pay Federal, State, County and municipal taxes, including the special tax burdens above mentioned, except social security

taxes not effective until January 1, 1936, in sums approximately as follows:

Complainant, The Tennessee Electric Power Company	\$2,120,000
Complainant, Franklin Power & Light Company	5,000
Complainant, Memphis Power & Light Company	887,925
Complainant, Southern Tennessee Power Company	5,000
Complainant, Birmingham Electric Company	761,000
Complainant, Mississippi Power Company	340,000
Complainant, Appalachian Electric Power Company	2,848,000
Complainant, Georgia Power Company	2,350,000
Complainant, Carolina Power & Light Company	1,284,000
Complainant, Tennessee Public Service Company	439,490
Complainant, Holston River Electric Company	5,415
Complainant, Alabama Power Company	2,475,000
Complainant, Kentucky & West Virginia Power Company, Inc.	251,000
Complainant, Kingsport Utilities, Incorporated	45,000
Complainant, Kentucky-Tennessee Light & Power Co.	180,000
Complainant, West Tennessee Power & Light Company	104,000
Complainant, Mississippi Power & Light Company	562,471
Complainant, East Tennessee Light & Power Company	73,286
Complainant, Tennessee Eastern Electric Company	89,157

[fol. 10] Property Rights and Equities of Complainants

VII

Complainants are severally public utilities and each possesses all the rights, powers and franchises necessary under the laws of the State or States in which it does business, for the generation, transmission and sale of electric energy at wholesale and retail or at retail, in the territory served by it and all local powers, rights and privileges necessary for the distribution and sale of electric energy within the boundaries of the political subdivisions in which it renders electric service. Such powers, rights and privileges in gen-

eral are indeterminate or extend over a substantial number of years in the future.

In many instances Complainants respectively are rendering electric service to customers within the territory served by them under long term written agreements for the sale and purchase of large quantities of power. These contracts in general have several years in the future to run.

The aforesaid rights, powers, privileges, franchises and contracts and the reasonable expectancy of their renewal are property rights vested in the Complainants. Except for interference therewith by Defendants, which is threatened as hereinafter set forth, said rights, powers, privileges, franchises and contracts will remain in full force and effect until their expiration or full performance and each Complainant has a reasonable, probable and valuable expectancy of their renewal at or before their expiration.

VIII

For more than twenty years Complainant, The Tennessee Electric Power Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in 64 of the 95 counties in the State of Tennessee, as graphically shown upon the map which is hereto attached, marked "Exhibit A," and made a part hereof, and in the Counties of Murray, Walker, Catoosa and Fannin in the State of Georgia. It is also engaged in the business of furnishing transportation in and about the Cities of Chattanooga and Nashville, Tennessee, and water and ice service in several communities in Tennessee. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system, which together with its transportation and other properties, has a value in excess of \$99,000,000. Said system, exclusive of 8,000 k. w. generating capacity leased and under contract, includes hydroelectric generating plants with an installed capacity of 136,886 k. w., steam generating plants with an installed capacity of 104,322 k. w., 1,603 miles of high tension transmission lines, and 4,467 miles of distribution lines with all appurtenant equipment.

One of its hydroelectric projects, namely, its dam across the Tennessee River at Hales Bar, near Chattanooga, Ten-

nessee, was constructed under an Act of Congress of April 26, 1904, as amended. Said Act required Complainant's predecessor to purchase and pay for all lands on either side of the river necessary to the construction and operation of said project, including flowage rights and rights of way, required it to construct and complete the necessary locks and dam at its expense under specifications and plans to be approved by the Secretary of War, and required it to deed the aforesaid land and improvements to the United States in consideration of which it, and its successors and assigns, were given the right to possess and use the water power produced for a period of 99 years.

In reliance upon the terms and conditions of said Act of April 26, 1904, as amended, it expended large sums of money in the construction of its dam and project works and in the construction of transmission lines, sub-stations and distribution systems in order to market the power to be generated at such dam and project works, all within the area which the Defendants have marked out for seizure under their plan and program as hereinafter more particularly set out in Paragraphs XIII to XVIII, inclusive.

[fol. 12] The United States has received and accepted the benefits of the works of the Complainant which were constructed in reliance that under the aforesaid Act of Congress Complainant would have the right and privilege to serve the market for which said hydroelectric generating plant was intended and would have the right to dispose of the energy generated in said plant without unlawful interference or competition from or instigated by the Federal Government, or its agencies, and in reliance that the rights granted to Complainant under said Act would not be revoked prior to the expiration of said grant except upon payment of full compensation as provided by the terms thereof. To permit Defendants to consummate their plan hereinafter set forth would permit the United States to take without compensation the consideration which the Federal Government agreed Complainant should receive for making such public improvement and would be a violation of the aforesaid rights of Complainant.

Said Complainant serves approximately 122,000 electric customers in an area of 25,000 square miles, with a population of approximately 1,275,000 inhabitants. Its gross annual electric revenue is approximately \$10,750,000. Se-

curities outstanding include \$46,534,800 in bonds, \$24,129,600 in preferred stock, and \$17,794,000 in common stock.

For six years Franklin Power & Light Company has been engaged in the business of transmitting, distributing and selling electricity as a public utility in the City of Franklin, Tennessee, and the vicinity thereof, and during a part of such time in generating such electricity. For the purpose of such service it has owned and now owns a steam plant and distribution system of the value of approximately \$350,000. The community that it serves has a population of approximately 5,000. It has approximately 850 customers. Its gross annual revenues are approximately \$70,000 and it has \$107,538.50 of outstanding obligations. Its approximate annual sales of current amount to 3,500,000 k.w.

For more than fifty years Complainant, Memphis Power & Light Company, and its predecessors in interest, have [fol. 13] been engaged, and said Complainant is now engaged in the business of generating, transmitting, distributing and selling electricity as a public utility, and in the distribution and sale of natural gas, to the City of Memphis and the inhabitants of said City and its vicinity. For the purpose of furnishing electric service within said area it owns, operates, and maintains an electric generating, transmitting, and distributing system with a value for physical properties alone in excess of \$25,000,000. Said system includes steam-generating plants with an installed capacity of 54,000 k.w., 307.89 miles of high-tension transmission lines, and 733.98 miles of distribution lines with all appurtenant equipment. It serves directly and indirectly approximately 52,614 customers in an area of 801 square miles, with a population of approximately 312,000 inhabitants. Its gross annual electric revenue is approximately \$4,400,000. Securities outstanding include \$15,275,000 in bonds, 61,264 shares of no par preferred stock, and 400,000 shares of no par common stock.

For more than six years the Complainant, Southern Tennessee Power Company, has owned certain property used and useful in transmitting electricity from Wilson Dam at Muscle Shoals to Iron City, Tennessee, near the Tennessee-Alabama State line, where its transmission line interconnects with the transmission system of The Tennessee Electric Power Company. Throughout this period its property has been and still is leased to The Tennessee Electric Power

Company and used by said Company in carrying on its business as a public utility. The value of the property of this Complainant and the ability of this Complainant to secure any return thereon is dependent upon the possibility of the use of such property by The Tennessee Electric Power Company or some other public utility; and if the privately owned utilities operating in this territory, through loss of business or otherwise, are deprived of the need or ability to use said property, the value of this Complainant's property will be reduced to junk value and its earning capacity will be destroyed. The properties of this Complainant have a value in excess of \$500,000 including approximately 15 miles of high tension transmission lines. Its gross annual [fol. 14] revenue is approximately \$250,000. It has 10 shares of no par value capital stock issued and outstanding at a stated value of \$100 and approximately \$100,000 of surplus and reserves and \$400,000 of notes payable to The Commonwealth & Southern Corporation (Delaware).

For more than thirty-five years Complainant, Birmingham Electric Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged in the business of transmitting, distributing and selling electricity and furnishing electric transportation services as a public utility in the county of Jefferson, Alabama and in the municipalities of Birmingham, Bessemer, Homewood, Fairfield, Tarrant City, Brighton, Lipscomb and Irondale in said state. For the purpose of furnishing electric service within said area it owns, operates, and maintains an electric transmitting, distributing and transportation system with a value for physical plant alone in excess of \$25,000,000. It serves directly approximately 60,904 customers in an area of 95.54 square miles, with a population of approximately 337,000 inhabitants. Its gross annual electric revenue is approximately \$4,027,000. Securities outstanding include \$12,200,000 in bonds, 63,572 shares of no par value preferred stock with preference in liquidation to the extent of \$6,357,200, and 800,000 shares of no par common stock.

For more than twenty years Complainant, Mississippi Power Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in 44 of the 82 counties in

the State of Mississippi, as graphically shown upon the attached map hereinabove referred to, which is marked "Exhibit A" and made a part hereof. It is also engaged in furnishing transportation in several cities.

For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value in excess of \$15,000,000 (including a small amount of transportation property). Said system exclusive of 4,950 k.w. generating capacity under contract includes steam generating [fol. 15] plants with an installed capacity of 18,822 k.w., 800 miles of high tension transmission lines, and 1,339 miles of distribution lines with all appurtenant equipment. It serves approximately 37,000 electric customers in an area of 13,000 square miles, with a population of approximately 220,000 inhabitants. Its gross annual electric revenue is approximately \$2,700,000. Securities outstanding include \$10,829,700 in bonds, \$3,523,092 in preferred stock, and \$4,500,000 in common stock.

For more than forty years Complainant, Appalachian Electric Power Company, and its predecessors in interest, have been carrying on and developing its business of generating, transmitting, distributing and selling electricity as a public utility, and said Complainant is now engaged in carrying on said business in the Counties of Boone, Cabell, Clay, Fayette, Greenbrier, Jackson, Kanawha, Lincoln, Logan, McDowell, Mason, Mercer, Mingo, Monroe, Nicholas, Putnam, Raleigh, Roane, Summers, Wayne, and Wyoming in the State of West Virginia, in the Counties of Albemarle, Amherst, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Fluvanna, Franklin, Giles, Grayson, Henry, Montgomery, Nelson, Pittsylvania, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe in the State of Virginia and in Sullivan County, Tennessee. For the purpose of furnishing electric service within said area it owns, operates, and maintains an electric generating, transmitting and distributing system with a value in excess of \$133,750,000. Said system includes hydroelectric generating plants with an installed capacity of 44,900 k.w., steam generating plants with an installed capacity of 296,225 k.w., 2,292 miles of high-tension transmission lines and 3,240 miles of distribution lines, with all appurtenant equipment.

It serves directly and indirectly approximately 129,200 customers in an area of 12,400 square miles, with a population of approximately 671,000 inhabitants. Its gross annual electric revenue is approximately \$18,500,000. Securities outstanding include \$83,543,000 in bonds and \$53,500,167 in preferred and common stock.

[fol. 16] For more than twenty years, Complainant, Georgia Power Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in 134 of the 161 counties in the State of Georgia, as graphically shown on the attached map hereinabove referred to, which is marked "Exhibit A" and made a part hereof. It is also engaged in furnishing transportation, gas, water and ice in several cities in Georgia, and steam heat in Atlanta, Georgia. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system which together with its transportation, gas and other properties, has a value in excess of \$260,000,000. Said system, exclusive of 26,028 k.w. generating capacity leased and under contract, includes hydroelectric generating plants with an installed capacity of 287,387 k.w., steam generating plants with an installed capacity of 92,226 k.w., 3,738 miles of high tension transmission lines, and 6,110 miles of distribution lines with all appurtenant equipment.

In reliance upon State, County and municipal franchises and licenses, said Complainant expended a large sum of money in the construction of its dam and project works and in the construction of transmission lines, substations and distribution systems in order to transmit to market the power to be generated at such dam and project works. It has outlined and described a territory which it proposed to supply with such power, and which it ultimately did supply and which it is supplying at the time of filing this bill of complaint. Such market which it now supplies is in large part within that area which the Defendants have marked out for seizure under their plan and program as hereinafter more particularly set out in Paragraphs XIII to XVIII inclusive.

Complainant, Georgia Power Company, serves approximately 170,000 electric customers in an area of 49,500 square

miles, with a population of approximately 2,750,000 inhabitants. Its gross annual electric revenue is approximately [fol. 17] \$19,000,000. Securities outstanding include \$119,779,600 in bonds, \$43,308,399 in preferred stock, and \$87,778,002 in common stock.

For more than thirty years Complainant, Carolina Power & Light Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in the western portion of North Carolina, including portions of Haywood, Transylvania, Henderson, Buncombe, Madison, Yancey, Avery, Mitchell and Jackson Counties in said state, and in the eastern portion of North Carolina and part of South Carolina, all as more particularly shown on the attached map hereinbefore referred to, which is marked "Exhibit A" and made a part hereof. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value for physical plant alone in excess of \$92,000,000. Said system includes ten hydroelectric generating plants with an installed capacity of 204,800 k.w., steam-generating plants with an installed capacity of 43,000 k.w., 2,055 miles of high-tension transmission lines, and 2,762 miles of distribution lines. The largest of its hydroelectric projects was built under license from the Federal Power Commission, issued on a finding that the power had a market in North Carolina and South Carolina and requiring Complainant to install costly navigation structures as part consideration for such license.

In reliance upon such license, said Complainant expended a large sum of money in the construction of its dam and project works and in the construction of transmission lines, substations and distribution systems in order to transmit to market the power to be generated at such dam and project works. In its application to the Federal Power Commission for a license, said Complainant being required to indicate the proposed use or market for the power to be developed, outlined and described a territory which it proposed to supply with such power, and which it ultimately did supply and which it is supplying at the time of filing this bill of complaint. Such market which it now supplies is within that [fol. 18] area which the Defendants have marked out for

seizure under their plan and program as hereinafter more particularly set out in Paragraphs XIII to XVIII inclusive.

Complainant, in good faith, accepted said license from the Federal Power Commission with the agreement and understanding with the Federal Government under the Federal Water Power Act and the license issued to Complainant thereunder, that Complainant would have, as part of the consideration for incurring such obligations and making such investments, the right and privilege freely to serve the market and dispose of the energy generated in said plant without unlawful interference or competition from, or instigated by, the Federal Government, or its agencies, which have an option under said license and under Section 14 of the Federal Water Power Act to acquire the property covered thereby upon expiration of the license period, upon payment of the then net investment of the Licensee or the fair value of the property covered by the license, whichever is less. The United States has accepted the benefits of the works of the Complainant and the Complainant has complied with all of its duties and obligations under the license issued to it. To permit Defendants to consummate their plan hereinafter set forth would seriously impair Complainant's ability to perform its obligations under said license, would permit the United States to take without compensation the consideration which the Federal Government agreed Complainant should receive for making such public improvement or assuming such public obligation and would be a violation of the duties owed by the Government and of the rights of Complainant under its license.

Complainant, Carolina Power & Light Company, serves directly approximately 75,324 customers in an area of 22,000 square miles, with a population of approximately 443,000 inhabitants. It serves at wholesale 25 other companies and municipalities, including Tennessee Public Service Company, which resell such electricity to their customers. It sells to Tennessee Public Service Company under contract [fol. 19] practically all of the electricity required by the Tennessee Public Service Company for distribution and sale in Knoxville, Tennessee, and vicinity. Its gross annual electric revenue is approximately \$10,000,000. Securities outstanding include \$46,000,000 in bonds, 119,736 shares of preferred stock and 2,500,000 shares of common stock.

For many years Complainant, Tennessee Public Service

Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in the City of Knoxville, Tennessee, and in the towns of Sevierville, Newport, Dandridge, White Pine, and Jefferson City, and to rural customers in the Counties of Knox, Jefferson, Cocke, Sevier and Union in the State of Tennessee. It also furnishes public transportation service in and about the City of Knoxville. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system, which together with its other properties has a total value for physical plant alone in excess of \$17,356,000. Said system includes a hydroelectric plant with an installed capacity of 150 k.w., steam generating plants with an installed capacity of 6,125 k.w., 180.58 miles of high-tension transmission lines, and 842.96 miles of distribution lines, with all appurtenant equipment. It serves directly and indirectly approximately 29,786 customers in an area of 393 square miles, with a population of approximately 140,000 inhabitants. Its gross annual revenue is approximately \$2,509,000 from its electric properties and \$670,000 from its railway properties. Securities outstanding include \$7,780,000 in bonds, 50,000 shares of no par value preferred stock, and 1,000,000 shares of no par value common stock.

For many years Complainant, Holston River Electric Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged in the business of purchasing, transmitting, distributing and selling electricity as a public utility in and about the town of Rogersville, Hawkins County, Tennessee, and to rural customers in Hawkins and Hamblen Counties, Tennessee. For the [fol. 20] purpose of furnishing electric service within said area it owns, operates and maintains a transmitting and distributing system with a value for physical plant alone in excess of \$258,000. Said system includes 8.81 miles of high-tension transmission lines and 97.87 miles of distribution lines, with all appurtenant equipment. It serves directly approximately 907 customers in an area of 50 square miles, with a population of approximately 7,000 inhabitants. Its gross annual electric revenue is approximately \$40,000.

Securities outstanding include \$6,000 in par value of common stock.

For more than twenty years Complainant, Alabama Power Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility, said Complainant now conducting such operations in 65 of the 67 counties of the State of Alabama, being all of the counties in said State excepting Pike and Conecuh. It also furnishes transportation in the cities of Tuscaloosa and Huntsville and ice and water in several communities. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value for physical plant alone in excess of \$175,000,000. Said system, exclusive of 53,550 k.w. generating capacity leased and under contract, includes hydro-electric generating plants with an installed capacity of 414,500 k.w., steam generating plants with an installed capacity of 157,262 k.w., 4,002 miles of high tension transmission lines, and 3,930 miles of distribution lines, with all appurtenant equipment. Three of its six hydro-electric projects, namely, Mitchell Dam and Jordan Dam on the Coosa River, and Martin Dam on the Tallapoosa River, were built under fifty-year licenses from the Federal Power Commission issued on July 27, 1921, November 7, 1925, and June 7, 1924, respectively, on findings that each of such dams on the Coosa River was necessary and convenient for the development and improvement of navigation and utilization of power therein and was best adapted to a comprehensive scheme of development and [fol. 21] utilization of the Coosa River for such purposes; that the impounding and release of waters from the dam on the Tallapoosa River, a non-navigable stream, would benefit navigation and flood control on the Alabama River, a navigable stream, formed by the junction of the Tallapoosa and Coosa rivers; that there was a market in Alabama for the power output of such plants and that such projects were justified in the public interest. The total installed capacity of such plants is 332,500 k.w. The terms of the licenses under which such dams were constructed on the Coosa River require Complainants to install costly navigation structures as part consideration for such licenses. A fourth hydro-electric project was built under authority of an Act of Congress of March 4, 1907.

In reliance upon such licenses issued under the provisions of the Federal Water Power Act, and upon the terms and conditions of the Act of Congress of March 4, 1907, said Complainant expended a large sum of money, to-wit, in excess of \$50,000,000, in the construction of such dams and project works; and a sum of money in excess of \$50,000,000 in the construction of transmission lines, substations and distribution systems in the State of Alabama in order to transmit to market the power to be generated at such dams and project works. In its several applications to the Federal Power Commission for licenses, said Complainant being required to indicate the proposed use or market for the power to be developed, outlined and described a territory which it proposed to supply with such power, and which it ultimately did supply and which (except as to a small portion of such market which is now being supplied by the Defendant TVA, as a result of the sale of a part of the said Complainant's system to the Defendant TVA under the terms of a contract dated January 4, 1934) it is supplying at the time of filing this bill of complaint. And said Complainant says that such market which it now supplies is within that area which the Defendants have marked out for seizure under their plan and program as hereinafter more particularly set out in Paragraphs XIII to XVIII inclusive. [fol. 22] Complainant, in good faith, accepted said licenses from the Federal Power Commission and, in reliance upon the terms and conditions of said Act of March 4, 1907, built the projects above referred to, and incurred liability with reference to the improvement of the navigable features of the Coosa and Tallapoosa Rivers, with the agreement and understanding with the Federal Government under the Act of March 4, 1907 and under the Federal Water Power Act and the licenses issued to Complainant thereunder, that Complainant would have, as part of the consideration for incurring such obligations and making such investments, the right and privilege freely to serve the market and dispose of the energy generated in said plants without unlawful interference or competition from, or instigated by, the Federal Government, or its agencies, which have an option under said licenses and under Section 14 of the Federal Water Power Act to acquire the property covered thereby upon the expiration of the license period, upon payment of the then net investment of the Licensee or the fair value of the property covered by the license, whichever is less. The

United States has accepted the benefits of the works of the Complainant and the Complainant has complied with all of its duties and obligations under the licenses issued to it and under the Act of March 4, 1907. To permit Defendants to consummate their plan hereinafter set forth would seriously impair Complainant's ability to perform its obligations under said licenses and under said Act with reference to improvement of navigation and otherwise, would permit the United States to take without compensation the consideration which the Federal Government agreed Complainant should receive for making such public improvements or assuming such public obligations and would be a violation of the duties owed by the Government and of the rights of Complainant under its licenses and under said Act.

Complainant Alabama Power Company's system serves directly and indirectly approximately 94% of the customers for electricity in Alabama being 200,000 customers in an area of 50,000 square miles, with a population of 2,000,000. [fol. 23] Its gross annual electric revenue is approximately \$16,000,000. Securities outstanding include \$96,925,000 in bonds, \$35,751,258.22 in preferred stock, and \$48,961,300 in common stock.

For more than forty years Complainant, Kentucky & West Virginia Power Company, Inc., and its predecessors in interest, have been carrying on and developing the business of generating, transmitting, distributing and selling electricity as a public utility, and said Complainant is now carrying on said business in the Counties of Pike, Martin, Perry, Knott, Johnson, Boyd, Greenup, Letcher, Carter, Floyd, Breathitt, Rowan, Leslie and Magoffin in the State of Kentucky. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value in excess of \$13,345,000. Said system includes steam-generating plants with an installed capacity of 19,500 k. w., 406 miles of high-tension transmission lines, and 476 miles of distribution lines, with all appurtenant equipment. It serves directly and indirectly approximately 19,600 customers in an area of 1,621 square miles with a population of approximately 142,000 inhabitants. Its gross annual electric revenue is approximately \$3,050,000. All of the securities of Kentucky & West Virginia Power Company, Inc. are pledged under the mortgage, dated May 1, 1926, of the Ap-

palachian Electric Power Company to Bankers Trust Company as Trustee. The securities so deposited consist of \$8,499,000 in bonds, \$802,000 in preferred stock, and \$3,345,525 in common stock.

For about twenty years Complainant, Kingsport Utilities, Incorporated, and its predecessors in interest, have been carrying on and developing the business of generating, transmitting, distributing and selling electricity as a public utility, and Complainant is now carrying on said business in the Counties of Sullivan and Hawkins in the State of Tennessee. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value in excess of \$2,180,000. Said system includes steam-generating plants with an installed capacity of 11,400 [fol. 24] k. w., 5.7 miles of high-tension transmission lines, and 111 miles of distribution lines, with all appurtenant equipment. It serves directly and indirectly approximately 3,800 customers in an area of 23 square miles with a population of approximately 12,000 inhabitants. Its gross annual electric revenue is approximately \$460,000. All of the securities of Kingsport Utilities, Incorporated, are pledged under the mortgage dated May 1, 1926, of the Appalachian Electric Power Company to Bankers Trust Company as Trustee. The securities so deposited consist of \$1,044,000 in bonds, \$500,000 in preferred stock, and \$500,000 in common stock.

For more than twenty-five years Complainant, Kentucky-Tennessee Light & Power Co., and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in 24 counties in the State of Kentucky and in 9 counties in the State of Tennessee, all as shown on the attached map, hereinbefore referred to, which is marked "Exhibit A" and made a part hereof. For the purpose of furnishing electric service within said area it owns, operates and maintains an electric generating, transmitting and distributing system with a value for physical plant alone in excess of \$13,000,000. Said system includes hydro-electric generating plants with an installed capacity of 375 k. w., steam and oil-generating plants with an installed capacity of 19,012 k. w., 567.5 miles of high tension transmission lines, and 498.2 miles of distribution lines, with all appurtenant equipment. It serves

directly and indirectly approximately 30,238 customers in an area of 2,730 square miles, with a population of approximately 118,000 inhabitants. Its gross annual electric revenue is approximately \$1,898,000. Securities outstanding include \$7,342,600 in bonds, and \$1,651,100 in common stock.

For approximately forty years Complainant, West Tennessee Power & Light Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, transmitting, distributing and selling electricity as a public utility in nine counties located in the western portion of the State of Tennessee all as shown on the attached map hereinbefore referred to, which is marked "Exhibit A" and made a part hereof. For the purpose of furnishing electric service within said area, it owns, operates and maintains an electric generating, transmitting and distributing system, and gas distributing system, water plants, ice factories, and street railway system, its entire physical properties having a value in excess of \$3,375,000. Said electric system includes steam and oil generating plants and stations, with an installed capacity of 5,228 k. w., approximately 200 miles of high-tension transmission lines, and approximately 150 miles of distribution lines, with all appurtenant equipment. It serves directly and indirectly approximately 10,000 electric, 4,000 gas and 1,000 water customers; the area served by its electric service comprises approximately 2,000 square miles, with a population of approximately 50,000 inhabitants. Its gross annual electric revenue is approximately \$607,000. Securities outstanding include 100,000 shares of no par common stock having a stated value of \$1,500,000.

For many years Complainant, Mississippi Power & Light Company, and its predecessors in interest, have been engaged, and said Complainant is now engaged, in the business of generating, purchasing, transmitting, distributing and selling electricity as a public utility in the western portion of the State of Mississippi, including the Cities of Jackson, Vicksburg, Natchez and Greenville and including approximately 200 other communities, said area being more particularly shown on the attached map hereinbefore referred to, which is marked "Exhibit A" and made a part hereof. It also is engaged in the acquisition, transportation and distribution of natural gas within the same territory in the State of Mississippi. For the purpose of furnishing electric service within said area it owns, operates and main-

tains an electric generating, transmitting and distributing system with a value for physical plant alone in excess of \$15,000,000. Said system includes 456.8 miles of high-tension transmission lines and 2,398 miles of distribution lines, with all appurtenant equipment. It serves directly and indirectly approximately 40,000 electric customers and 16,000 [fol. 26] gas customers. Its gross annual electric revenue is approximately \$3,640,000 and its gross annual income from its other properties is approximately \$1,106,000. Securities outstanding include \$16,569,980 in bonds and other funded indebtedness, 69,000 shares of first preferred stock, 35,000 shares of second preferred stock, and 1,000,000 shares of common stock.

For many years Complainants, East Tennessee Light & Power Company, and its subsidiary, Tennessee Eastern Electric Company, and their predecessors in interest, have been engaged, and said Complainants are now engaged in the business of generating, transmitting, distributing and selling electricity as a public utility in the Counties of Johnson, Greene, Washington, Hawkins, Carter, Sullivan and Unicoi in the State of Tennessee, in the Counties of Scott and Washington in the State of Virginia and in the County of Avery in the State of North Carolina. For the purpose of furnishing electric service within said area they own, operate and maintain an electric generating, transmitting and distributing system with a value for physical plant alone in excess of \$8,000,000. Said system includes three hydroelectric plants having an installed capacity of 15,900 k. w., a steam generating plant with an installed capacity of 8,500 k. w., 145 miles of high-tension transmission lines, and 660 miles of distribution lines, with all appurtenant equipment. Said companies serve directly and indirectly approximately 16,754 customers in a territory with a population of approximately 90,000 inhabitants. They also manufacture and distribute gas to approximately 1,670 customers. The gross annual electric revenue of said companies is approximately \$1,144,000, and the gross annual income from the sale of gas is approximately \$81,000. Securities outstanding include \$5,304,500 in bonds, \$1,224,328 in preferred stock, and 50,000 shares of no par common stock.

The territory served by each of the Complainants except Franklin Power & Light Company, the location of TVA

dams built, under construction or authorized, and the location of TVA dams recommended for construction are graphically shown on the map marked "Exhibit A" attached hereto and made a part hereof. A few small electric utilities which operate in the territory generally served by some of the Complainants are not shown on Exhibit A, nor is a small market area in northwestern Alabama very recently acquired by TVA. The location of transmission lines acquired, constructed or under construction by TVA, the location of certain of the transmission lines for which congressional appropriations have been requested by TVA but omitting 398 miles of additional transmission lines and 800 miles of proposed rural lines for which TVA has also requested congressional appropriations, the location of the principal transmission lines of the existing utilities including the Complainants, the location of TVA dams built, under construction or authorized and the location of TVA dams recommended for construction are severally shown upon the map marked "Exhibit B" attached hereto and made a part hereof.

IX

Complainants are public utilities with facilities more than adequate to supply, and fully supplying, the needs for electric service of the inhabitants of the territories respectively served. Their properties and facilities are more than adequate fully to meet all demands for electric service in the territories served by them for a reasonable time in the future, and when and if further capacity shall be required, the Complainants are severally ready, willing and able to supply the same. The properties and facilities of each of the Complainants used in rendering electric service are modern and efficient and are thoroughly equipped to and do render modern, adequate, efficient, dependable and economical service to the public. The system of each Complainant is designed and constructed to fit the peculiar requirements of the area in which it serves. The several systems of the Complainants represent intensive applications of the economies of large-scale integrated electric distribution. The plant and property of each Complainant, used in supplying such public utility service, has been developed and [fol. 28] perfected as a going concern of great value over a period of many years.

There is no demand or market for electric energy in the

territories served by the several Complainants beyond that supplied by them. Since the commencement of their respective operations, Complainants and their predecessors at all times have severally been and are now ready, able and willing to serve any and all customers within the territories in which they respectively operate. The inhabitants of the areas served respectively by the Complainants are, and for many years prior hereto have been ready, willing and desirous of using the services of the Complainants. As more particularly alleged in Paragraph VIII, they and their predecessors, in reliance upon their franchise rights, have severally, over a period of many years, established, extended, operated and maintained, and Complainants now severally own, operate and maintain, their respective businesses as going solvent concerns, with many employees, customers and business contacts, financial credit and reputation acquired, established, developed and expanded at great expense, and having great value. Complainants and their predecessors, throughout the periods during which they have rendered service, have severally built up goodwill of great value. Over a period of many years the Complainants have contributed time, money and man power at a cost of millions of dollars for the development of both the technological and business sides of the industry and have thereby created intangible values of great benefit to the public and the industry.

The good relations developed, established and existing between the Complainants and their respective customers represent one of the most valuable assets of each. The aggregate of the good will thus built up by the adequacy and reasonableness of the services rendered by all the Complainants is a large and valuable factor in the favor with which the investing public regards the industry in which the Complainants are engaged and creates the market in which the securities of the Complainants have been sold and in the future must be sold in the course of Complainants' [fol. 29] activities as going concerns. Except for the acts of the Defendants hereinafter specified, the friendly and established business relationships existing between the Complainants and their respective customers will continue on the same satisfactory basis which now exists and which has existed for many years past with mutual satisfaction and benefit to the Complainants and their customers.

X

The Complainants severally have continuously pursued the policy of reducing their respective rates for electric service, and such rates today are reasonable and yield Complainants no more than a reasonable return. The rates and service of each of the Complainants are also subject to regulation and are fully and adequately regulated by the public authorities of the respective States in which they operate in the shape generally of public service commissions, exercising the sovereign powers of the respective States. Such public service commissions represent a system of American State and local regulation of public service utilities which, beginning about thirty years ago at the time when the electric industry was commencing to expand into its modern size, has developed concurrently with the growth of that industry. Under said system the respective States and their subdivisions have exercised a constantly broadening jurisdiction and control over the methods, services, rates, revenues and securities of the said utilities in the interest of the consumers of their electricity, the investors in their securities, and the revenues of the State where their activities are carried on. This development of regulation has been steadily growing in efficiency and adequacy. The decisions of these commissions have produced and are steadily expanding a system of American administrative law recognized by all fair-minded students of the subject as reasonable, effective and flexible in its adaptation to the needs of the respective localities and States where it is applied and as a creditable example of local self-government.

[fol. 30] The several Complainant companies have organized under the laws of the several States and in effect have accepted the invitation extended by them to create the facilities which, in harmony with their declared policy and subject to the regulatory authority established by them, will supply said States and their people the advantages of electric service. They have thus, and in reliance upon the right and power of the said States reserved to them under the Ninth and Tenth Amendments to the Constitution of the United States, invested the great sums of money herein severally shown, complied with the regulation imposed by the police power of the several States, and constructed and extended their systems in conformity with the policy of said States. The securities of the Complainants in the amount

of many millions of dollars are widely held by the investing public in the United States and foreign countries, who have invested their funds in such lawful business enterprises under the authority and protection of the Constitution of the United States.

The Complainants and their predecessors by the acceptance of franchises, permits and consents and by entering into and upon the business of supplying electric energy and service to such States, their political subdivisions and their citizens and residents, became not only entitled but obligated by law to continue to furnish at reasonable, uniform and non-discriminatory rates such services within the territories now served, respectively, by them until by action of the several States, their properly authorized regulatory bodies or their duly authorized political subdivisions, these Complainants are severally relieved of such obligation. Each State in which Complainants operate has declared its own local public policy in relation to the manner, terms and conditions in and upon which electric public utility service shall be undertaken and carried on in such States. For illustration, the established regulatory policies of the States of Alabama, Georgia and Tennessee is to maintain uniform rates throughout the State as part of a policy to provide equality of opportunity, to promote a uniform development of all of the resources of the State and to avoid unnecessary congestion of population in particular centers. Each Complainant is required to conform to the public policy of the State or States in which it serves.

XI

As hereinafter more fully appears, the Tennessee Valley Authority Act was passed in 1933 as part of a permanent "National Power Policy" and purported to authorize the establishment of a great Federally-owned and operated public utility, to operate in all, or a substantial part, of each of the territories served by each of the Complainants and in which the Complainants had severally built up and established going businesses through the expenditure of much time and effort and great sums of money. Purporting to act pursuant to and under the authority of the Tennessee Valley Authority Act, the Defendant- sometime in 1933 promulgated a plan unlawfully to disrupt the good relations existing between Complainants and their respective custo-

mers, to appropriate their respective markets, to invade and destroy the property, business and business relationships of the Complainants in the preceding paragraph described, and unlawfully conspired together and with the Federal Administration of Public Works, its officers and agents, and have ever since so conspired by and through unlawful means to take unlawfully from the Complainants their businesses, rights and properties, all as hereinafter more particularly set forth.

The Permanent National Power Policy

XII

Late in 1932 and early in 1933, the present Executive announced and subsequently the National Administration under his leadership officially undertook the execution of a permanent "National Power Policy" to make electricity "more broadly available at cheaper rates to industry, to domestic and to agricultural consumers," to effectuate Federal regulation of rates for the intrastate generation, distribution and sale of electricity, to establish Federal regulation and control over matters of policy and service in connection with intrastate electric utilities and to promote and bring about public ownership or cooperative ownership of facilities for the generation, transmission and distribution of electricity in intrastate commerce.

In furtherance of said "National Power Policy" the Federal Government has created the Tennessee Valley Authority and is promoting other power projects in various parts of the country to be built, owned and operated by the Federal Government as "yardsticks" by which to measure the cost of electricity, to regulate intrastate rates and charges for electricity and to promote public ownership of local intrastate electric facilities, and has established or utilized various additional agencies, such as the Public Works Administration, the Electric Home and Farm Authority, and the Rural Electrification Administration. Such agencies have been and are actually engaged in carrying out various phases of said "National Power Policy."

This policy and its purpose was in part announced and defined in an address delivered by the present Executive at Portland, Oregon, on September 21, 1932, where he stated:

"* * * Where a community * * * is not satisfied with the service rendered or the rates charged by the private

utility, it has the undeniable right as one of its functions of government . . . to set up . . . its own governmentally owned and operated service. . . . The fact that a community can, by vote of the electorate, create a yardstick of its own, will, in most cases, guarantee a good service and low rates to its population . . . 'a birch rod in the cupboard.'

"That is the principle that applies to communities. I would apply the same principle to the Federal and State Governments."

"Here you have the clear picture of four great government power developments in the United States, the St. Lawrence River in the Northeast, Muscle Shoals in the Southeast, the Boulder Dam project in the Southwest, and finally, but by no means the least of them, the Columbia River in the Northwest. Each one of these will be forever a national [fol 33] yardstick to prevent extortion against the public and to encourage the wider use of that servant of the people—electricity."

The nature and purpose of this policy was restated and emphasized in an address delivered by the present Executive at Milwaukee, Wisconsin, on September 30, 1932, in which he said:

"We recognize, also that because government regulation is often unable to keep up with the various devices of private utility companies that seek to evade the broad public policy, from time to time it is necessary for government to have what I called, up in Portland, Oregon, a 'birch rod' in the cupboard—two birch rods in fact.

"One of them is the development by government of certain great water-power resources, to be used as a yardstick for the benefit of the people;

.

"The other 'birch rod' is the principle of public policy which would allow any community or county or city or any town or any village or any district actually to engage in the supplying of electricity"

In further definition and emphasis of the nature and purpose of this policy, the President in his St. Lawrence Treaty Message (Senate Document 110, 73rd Congress, Second Ses-

sion) delivered to the Congress in Joint Session in January 3, 1934, stated:

"As you know, I have advocated the development of four great power areas in the United States, each to serve as a yardstick and each to be controlled by government or governmental agencies. The Tennessee Valley plans and projects of the Southeast, the Boulder Dam on the Colorado River in the Southwest, the Columbia River projects in the Northwest are already under construction. The St. Lawrence development in the Northeast calls for action."

And on July 9, 1934, the President caused to be established in the Federal Administration of Public Works a National Power Policy Committee and stated with reference to said Committee in a letter of said date, addressed to Harold L. Ickes, as Federal Administrator of Public Works, that:

[fol. 34] "Its duty will be to develop a plan for the closer cooperation of the several factors in our electrical power supply—both public and private—whereby national policy in power matters may be unified and electricity be made more broadly available at cheaper rates to industry, to domestic and, particularly, to agricultural consumers."

On September 30, 1935, in his address at Boulder Dam, President Roosevelt, as reported in the New York Times of October 1, 1935, said:

"These great government power projects will affect not only the development of agriculture and industry and mining in this section they serve, but they will also prove useful yardsticks to measure the cost of power throughout the United States. * * *"

The existence, nature, purpose and scope of this policy have been further publicly announced and defined by other executive officers of the Federal Government charged with the execution of various phases of said policy as shown in Exhibit C, attached hereto, and made a part hereof.

The Power Program Authorized by the Tennessee Valley Authority Act

XIII

The Tennessee Valley Authority Act became effective on May 18, 1933, and was amended on August 31, 1935. This

Act, which was passed as part of and pursuant to the aforesaid "National Power Policy," created the defendant corporation, Tennessee Valley Authority, and purported to authorize, if it did not make mandatory, the construction, development and operation of a great Federally owned and operated public utility system for the generation and distribution of electricity in the Tennessee Valley, and contiguous territory within physical transmission distance of the generating plants to be constructed.

The Act on its face discloses a purpose and intent (1) to authorize a large and indeterminate number of great works [fol. 35] for the direct and primary purpose of creating a vast supply of electric power to be deliberately produced for use in carrying on a great Federally owned public utility and not as an incident of the exercise of any powers delegated to the United States by the Constitution; (2) to utilize the electric power so developed under the pretext of disposing of property of the United States so as to establish the United States on a vast scale in the industry or business of producing, transmitting and selling electric power as a proprietary and commercial venture, to launch the Federal Government upon a competitive commercial enterprise and to draw to the Federal Government the conduct and management of a business having no relation to the powers for which that Government was established; (3) to dispose of such electric energy not for the public benefit but for the private benefit of certain classes of people living in a restricted area of the nation; and (4) to dispose of the property so wrongfully acquired in a manner inconsistent with the foundation principles of our dual system of Government and so as to govern the concerns reserved to the States.

To carry on this business of producing, transmitting and selling electric power as a commercial venture and to accomplish the foregoing objectives, the Act creates a corporation (16 U. S. C. 831) having the usual powers and characteristics of a private business corporation such as the right of succession (16 U. S. C. 831c(a)), the power to sue and be sued (16 U. S. C. 831c(b)), the power to make such contracts as are authorized by its charter (16 U. S. C.

831c(d)), the power to "purchase or lease and hold such real and personal property as it deems necessary or convenient in the transaction of its *business*," and to "dispose of any such personal property held by it" (16 U. S. C. 831c(f)), "such powers as may be necessary or appropriate for the exercise of the powers herein specifically conferred upon the corporation" (16 U. S. C. 831c (g)), and the power to employ such persons "as are necessary for the transaction of its *business*," to fix their compensation and to define their duties without regard to the Civil Service laws of the United States. (16 U. S. C. 831b.)

[fol. 36] That the primary purpose of this business corporation is to carry on the proprietary commercial industry or business of generating, transmitting and selling electric power is clear upon the face of the Act. This appears from the following provisions of the Act, among others:

1. TVA "shall have power to acquire real estate for the construction of dams, reservoirs, transmission lines, power houses and other structures * * * at any point *along the Tennessee River or any of its tributaries*, * * *" (16 U. S. C. 831c(i)).

2. TVA "shall have power to acquire or construct power houses, power structures, transmission lines * * * and incidental works in the Tennessee River and its tributaries, * * *" (16 U. S. C. 831c(j)).

3. TVA "shall have power to exercise the power of eminent domain, and to condemn all property that it deems necessary for carrying out the purposes of this chapter, * * *" (16 U. S. C. 831c(i)).

4. TVA "shall have power to unite the various power installations into one or more systems by transmission lines" and the Directors of the Authority are ordered "to report to Congress their recommendations not later than April 1, 1936, for the unified development of the Tennessee River system." (16 U. S. C. 831c(j)).

5. TVA shall have power "to produce, distribute and sell electric power, as herein particularly specified." (16 U. S. C. 831d(1)).

6. "No director shall have financial interest in any public utility corporation engaged in the business of distributing and selling power to the public nor * * * in any business

that may be adversely affected by the success of the corporation . . . as a *producer of electric power*." (16 U. S. C. 831a (f)).

7. The Act authorizes the construction of "a dam in and across Clinch River in the State of Tennessee . . . according to the latest and most approved designs, including power house and hydroelectric installations and equipment for the generation of power, in order that the waters of the Clinch River may be impounded and stored above said dam [fol. 37] for the purpose of increasing and regulating the flow of the Clinch River and the Tennessee River below, so that the maximum amount of primary power may be developed at Dam Numbered 2 and at any and all other dams below the said Cove Creek Dam: . . . " (16 U. S. C. 831p).

8. The TVA Board is authorized to enter into contracts for the exchange of power "with *other power systems*" and for "emergency or break-down relief." (16 U. S. C. 831k).

9. "The (TVA) Board is . . . authorized to sell the surplus power not used in its operations and for operation of locks and other works generated by it, to States, counties, municipalities, corporations, partnerships, or individuals, according to the policies hereinafter set forth; . . . " (16 U. S. C. 831i).

10. "The (TVA) Board is authorized to enter into contracts for such sale for a term not exceeding twenty years, . . . " (16 U. S. C. 831i).

11. "In order to promote and encourage the fullest possible use of electric light and power on farms within reasonable distance of any of its transmission lines, the Board in its discretion shall have power to construct transmission lines to farms and small villages that are not otherwise supplied with electricity at reasonable rates, . . . " (16 U. S. C. 831i).

12. "That in order to supply farms and small villages with electric power directly . . . , the Board in its discretion shall have power to acquire existing electric facilities used in serving such farms and small villages: . . . " (16 U. S. C. 831i).

13. "In order to place the Board upon a fair basis for making such contracts and for receiving bids for the sale of such power, it is hereby expressly authorized * * * to construct, lease, purchase or authorize the construction of transmission lines within transmission distance from the place where generated and to interconnect with *other systems.*" (16 U. S. C. 831k).

14. The Board may lease transmission lines to others "but no such lease shall be made that in any way interferes [fol. 38] with the use of such transmission line by the Board: * * *" (16 U. S. C. 831k).

15. "To facilitate the disposition of surplus power" the Corporation is authorized to extend credit to municipalities and non-profit organizations for the acquisition of existing facilities if they will purchase TVA power (16 U. S. C. 831k-1) and for such purpose the corporation is authorized to sell not exceeding \$50,000,000 in bonds (16 U. S. C. 831n-1).

16. Section 831l provides for payments to the States (Tennessee and Alabama only) in lieu of taxes upon the gross proceeds of the sale of power.

17. "The Board shall keep complete accounts of its costs of generation, transmission and distribution of electric energy, and shall keep a complete account of the total cost of generating and transmission facilities constructed or otherwise acquired by the Corporation, * * *" (16 U. S. C. 831m).

18. The TVA Board is required to report such costs "according to such uniform system of accounting for public utilities as the Federal Power Commission has" prescribed. (16 U. S. C. 831m).

19. "The Board is authorized and directed to make studies, experiments and determinations to promote the wider and better use of electric power for agricultural and domestic use, or for small or local industries, * * *" (16 U. S. C. 831i).

20. Any lease of the nitrate plant by TVA must provide that "the Board will sell to the lessee power for the operation of said plant *at the same schedule of prices that it*

charges all other customers for power of the same class and quantity." (16 U. S. C. 831d(n)).

21. TVA is vested with "exclusive use, possession and control of * * * Dam Numbered 2, located at Muscle Shoals, its power house, and all hydroelectric and operating appurtenances (except the locks) and all machinery, lands and buildings in connection therewith and all appurtenances thereof, * * *" (16 U. S. C. 831f(a)).

[fol. 39] 22. The TVA Board is required to file an annual report containing "an itemized statement of the cost of power at each power station, * * *" (16 U. S. C. 831h (a)).

23. TVA is required to reimburse the Comptroller General for such part of the expenses of the annual audit "as may be allocated to the cost of generating, transmitting and distributing electric energy * * *" (16 U. S. C. 831h (b)).

24. "The (TVA) Board is further authorized, whenever an opportunity is afforded, to provide and operate facilities for the generation of electric energy in order to avoid the waste of water power, to transmit and market such power as in this chapter provided, and thereby, so far as may be practicable, to assist in liquidating the cost or aid in the maintenance of the projects of the Authority" (16 U. S. C. 831h-1).

25. The TVA Board is authorized to issue and sell on the credit of the United States not exceeding \$50,000,000 in bonds for "the construction of any future dam, steam plant or other facility, to be used in whole or in part for the generation or transmission of electric power" (16 U. S. C. 831n).

26. The Board is required as soon as practicable to sell power at rates which will "make the power projects self-supporting and self-liquidating, * * *" (16 U. S. C. 831m).

27. The TVA Board is forbidden to convey land "on which there is a permanent dam, hydraulic power plant, fertilizer plant or munitions plant, heretofore or hereafter built by or for the United States or for the Authority." (16 U. S. C. 831c(k)).

28. The Corporation is given the right to use all patented methods, formulae and scientific information "necessary to enable the Corporation to use and employ . . . any method of improving and cheapening the production of hydroelectric power, . . ." (16 U. S. C. 831r).

29. TVA is expressly authorized to retain out of the proceeds of its operations each year "such part of such proceeds as in the opinion of the Board shall be necessary for the Corporation in the operation of dams and reservoirs, in conducting *its business* in generating, transmitting and distributing electric energy . . ." (16 U. S. C. 831y).

[fol. 40] The method of disposal of the electric power to be wrongfully developed as aforesaid is not in the public interest but by the terms of the Act the method of disposal is to be for the special and private benefit of the inhabitants of the area within transmission distance of the generating plants to be constructed and particularly of the specially favored classes of rural and domestic consumers. The method of disposal of the power by the very terms of the statutory scheme is inconsistent with the foundation principles of our dual system of government and is contrived to govern the concerns reserved to the States. Thus the statutory scheme specifically provides for the regulation of intrastate electric rates by contract, for the preference of domestic and rural consumers over industrial consumers, for the regulation of intrastate electric rates through unrestrained Federally subsidized competition and the deliberate and purposeful creation of a great surplus of electric energy and for the promotion of public ownership of intrastate electric utilities without regard to the policy of the several States. These facts appear from the following provisions of the Act, among others:

1. "In the sale of such current by the (TVA) Board, it shall give preference to States, counties, municipalities and cooperative organizations of citizens or farmers not organized or doing business for profit, but primarily for the purpose of supplying electricity to its own citizens or members: . . ." (16 U. S. C. 831i).

2. "All contracts made with private companies or individuals for the sale of power, which power is to be resold for a profit, shall contain a provision authorizing the Board

to cancel said contract upon five years' notice in writing if the Board needs said power to supply the demands of States, counties or municipalities" (16 U. S. C. 831i).

3. "In order to promote and encourage the fullest possible use of electric light and power on farms within reasonable distance of any of its transmission lines, the Board in its discretion shall have power to construct transmission lines to farms and small villages that are not otherwise supplied with electricity at reasonable rates, and to make rules and regulations governing such sale and distribution of such [fol. 41] electric power as in its judgment may be just and equitable: * * *" (16 U. S. C. 831i).

4. "The Board is authorized to include in any contract, for the sale of power such terms and conditions, *including resale rate schedules*, and to provide for such rules and regulations as in its judgment may be necessary or desirable for carrying out the purposes of this chapter, and in case the purchaser shall fail to comply with any such terms and conditions, or violate any such rules and regulations, said contract may provide that it shall be voidable at the election of the Board: * * *" (16 U. S. C. 831i).

5. "It is hereby declared to be the policy of the Government so far as practical to distribute and sell the surplus power generated at Muscle Shoals equitably among the States, counties and municipalities within transmission distance. This policy is further declared to be that the projects herein provided for shall be considered primarily as for the benefit of the people of the section as a whole and particularly the domestic and rural consumers to whom the power can economically be made available, and accordingly that sale to and use by industry shall be a secondary purpose, to be utilized principally to secure a sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity" (16 U. S. C. 831j).

6. Whenever a public or cooperative non-profit organization will agree to construct a transmission line to a Government generating plant or main transmission line, the Board is authorized and directed to make a contract to sell the public or cooperative organization power for thirty years (16 U. S. C. 831k).

7. All contracts between TVA and a municipality or co-operative organization shall require sale and distribution to the ultimate consumer without discrimination upon penalty of voiding the contract (16 U. S. C. 831k).

8. "That as to any surplus power not so sold as above provided to States, counties, municipalities, or other said organizations, before the Board shall sell the same to any person or corporation engaged in the distribution and re-[fol. 42] sale of electricity for profit, it shall require said person or corporation to agree that any resale of such electric power by said person or corporation shall be made to the ultimate consumer of such electric power at prices that shall not exceed a schedule fixed by the Board from time to time as reasonable, just and fair; and in case of any such sale, if an amount is charged the ultimate consumer which is in excess of the price so deemed to be just, reasonable, and fair by the Board, the contract for such sale between the Board and such distributor of electricity shall be voidable at the election of the Board * * *" (16 U. S. C. 831k).

The Act contains minute provisions suitable only to the creation of a great power utility. This power program has no direct, real or substantial relation to navigation nor any other constitutional function of the Federal Government. The real, direct and primary object of the statute and program authorized thereby is the creation of a great Federally owned and operated utility and any references to navigation or to any other constitutional objective of Federal power are insubstantial, incidental and indirect and mere pretenses or pretexts under which it is sought to achieve an object not entrusted to the Federal Government but reserved to the States.

The Act seeks to set up and create an economic public policy contrary to the economic policy recognized and of force under the laws of the several States where the Act is operative and seeks to set up a Federally owned and operated business of generating, distributing and selling electricity; and the Defendants, as hereinafter more fully appears, are seeking to set up and apply such policy in these States. The policy declared by said Act, by favoring and giving preference to the sale and resale of electric energy and power without profit, creates or threatens to create un-

fair competition with the business of selling electric energy and power in said States by corporations which, being organized with private capital under the laws of the several States as hereinbefore more particularly set forth, must necessarily rely for their existence on making a fair profit as is allowed and authorized under the laws of the States [fol. 43] in which they operate. The Act, in thus attempting to set up a general economic public policy in the guise of selling property alleged to belong to the United States so as to favor a non-profit or socialistic policy in competition with and in preference to a profit policy, invades the reserved rights of the States and threatens to take the respective properties of these Complainants without due process of law.

Under the TVA Act, as amended, the number and capacity of steam and hydroelectric plants for the generation of electricity which the Defendants may construct and operate in the Tennessee basin, the quantity of electricity which the Defendants may create and manufacture for sale in a proprietary business, the extent to which and the territory in which TVA may acquire and construct lines for the transmission of electricity for distribution and sale and the extent and location of the territory in which TVA may engage in the proprietary business of generating and selling electricity are wholly undefined. Said Act, as amended, purports to vest complete and uncontrolled discretion in the defendants in relation to such matters and also the right to permit or prohibit the construction of hydroelectric plants by others, including Complainants, on the Tennessee River or any of its tributaries (16 U. S. C. 831y-1).

Except for the power to be produced through the operation of the facilities at Wilson Dam (which was constructed under the National Defense Act of 1916) to the extent the production and sale of such power has been held lawful and not to exceed the capacity which there existed prior to the doing of any of the acts herein complained of, the power to be produced under the program authorized by the Act is not surplus power incidentally produced by constitutional Federal works, but power which is to be deliberately and purposefully produced for the express purpose of distributing and selling such power as a proprietary business enterprise in a vast and undefined territory as hereinbefore set forth.

[fol. 44] **Threatened Injury to Complainants Through
Power Program Authorized by TVA Act**

XIV

The Tennessee River is formed by the junction of the French Broad and Holston Rivers in eastern Tennessee $4\frac{1}{2}$ miles above Knoxville. It flows southwest into northern Alabama, thence in a general westerly course across northern Alabama and from the northeast boundary of Mississippi nearly due north across Tennessee and Kentucky and enters the Ohio River at Paducah, Kentucky, 652 miles from the junction of the French Broad and Holston Rivers. It has a drainage area of over 40,000 square miles.

The Act authorizes the Defendants to develop each and all of the water power sites upon the Tennessee River and its tributaries and to construct such steam plants as they may see fit. A survey by the Corps of Engineers of the United States Army has established, and Complainants therefore allege, that there are 149 available water power sites upon the Tennessee River and its tributaries. The survey further shows, and Complainants therefore allege, that these water power sites, together with auxiliary steam plants, will provide over 5,000,000 k.w. of firm power and will produce 25 billion kilowatt hours of energy annually. The Act authorizes the Defendants to distribute this power throughout the area within transmission distance of the generating stations authorized to be constructed under the statutory program. Economical transmission distance in the present development of the art is 250 miles. Each of the territories served by the Complainants is wholly or in large part within 250 miles of some generating plant to be built under the program authorized by the Act, all as more fully appears from the map marked Exhibit A, attached hereto and made a part hereof. The annual consumption of electricity in the area within transmission distance of generating plants to be constructed under the statutory plan is approximately 14 billion kilowatt hours or only 56% of the quantity of electricity which the execution of the statutory plan will produce. The Complainants now supply, and their facilities are more than [fol. 45] adequate to supply, the present consumption of electricity in those parts of said area served respectively by them and Complainants' facilities are adequate to supply any probable increase in demand therein for a reasonable

period in the future; and if and when further facilities should be required they are ready, willing and able to provide them. Those parts of the area not served by Complainants are served by other existing privately-owned utilities with facilities more than adequate to supply the present consumption therein and any reasonable increase over a substantial future period. There is no need or use for the power to be produced by the Defendants as all demands for electricity are being met by Complainants in their territories and by other existing privately-owned utilities in the remainder of said area within transmission distance of the generating plants to be constructed under the statutory plan. The electric power to be produced by the Defendants under the statutory plan can only be sold, even in part, through displacement of the Complainants in the conduct of their respective businesses. The execution of the program authorized by the statute will necessarily and inevitably destroy all or a substantial part of the business and property of each of the Complainants.

The Power Program Promulgated by Defendants

XV

After the passage of the Tennessee Valley Authority Act in 1933, the Defendants, claiming to act pursuant to and under the authority of said Act, promulgated and officially announced a program for the construction, development and operation of a great Federally owned and operated public utility system for the generation and distribution of electricity in the territory within physical transmission distance of the electric generating plants to be constructed under the program. This program contemplates ultimately the unified development by TVA of all power sites on the Tennessee River and all of its tributaries under unified control as an integrated electric power system, the acquisition and development by TVA of all the water power sites on the Tennessee River and all of its tributaries, the construction and operation by TVA of hydroelectric plants at such sites, the use of auxiliary steam plants, the interconnection of all such power plants and the acquisition at prices fixed by TVA or the displacement by destructive and Federally subsidized competition of privately owned electric utilities in the area within physical transmission distance

of the generating plants to be constructed. To obtain an outlet for the electricity to be produced, said program further contemplates the appropriation of the entire market for electricity in the Tennessee basin and such larger area as the continually increasing quantity of power to be developed by the progressive execution of the program would be capable of serving. The appropriation of this market is to be accomplished by the construction or acquisition of transmission lines to points within physical transmission distance of all generating plants to be constructed and operated by TVA, and by the acquisition and operation of electric distribution plants in the area, either by TVA itself, or by political sub-divisions of the various States, under contract to use TVA power, and upon such terms and condition that TVA shall control and regulate electric rates and regulate electric service throughout the area to the exclusion of the States concerned and of their regulatory Commissions. For the taking of such market now held by the Complainants no appropriation is made by law and the Defendants propose and plan to take the market and property of the Complainants, without paying just compensation therefor.

The program, as promulgated by the Defendants, calls for the elimination of existing privately owned utilities in the area to the end that TVA shall have a compact market territory in which it will be the only purveyor of electric service as a public utility. To that end TVA proposes to acquire such transmission lines as it can use at its own price or to render them valueless through the construction of duplicate lines with Federal funds. The Defendants decline to sell power to existing privately owned utilities [fol. 47] other than as a temporary expedient. The TVA claims, under this program, the right to construct and operate duplicate distribution systems but the plan permits and encourages municipalities which will bind themselves to use TVA power to acquire existing distribution systems in the area at distress prices approved by TVA or to construct duplicate municipal distribution systems with such assistance and subsidization through TVA and other Government agencies as will bring about a destructive competition and destroy the business and property values of existing privately owned utilities. Under the program generating stations and transmission lines which are not desired by TVA will be rendered valueless; and unless

existing utilities will sell distribution systems to TVA or to the municipalities at grossly inadequate prices fixed by TVA, their businesses and property values in such municipalities are to be destroyed through the construction of duplicate systems and ruthless, Federally subsidized competition. The program has been briefly stated by the defendant Lilienthal, as follows:

“* * * the provisions of the Muscle Shoals (TVA) Act, together with the declarations of the President of the United States, required the Authority (TVA) to establish a yardstick. In other words, that the Authority was under the mandate to construct or acquire, either competitively or by purchase, the transmission systems and have the municipalities construct or acquire the distribution systems in a given area, so that it could determine the fair price at which electric energy should be sold.”

On August 25, 1933, the Defendants in an official public announcement of their power program specified the initial market area to be appropriated by TVA as portions of Tennessee, Mississippi and Alabama, and at the same time announced their intention of appropriating the market for power throughout the entire area within commercial or economic transmission distance of its generating plants, as additional power should be developed by the progressive execution of the program. A copy of this announcement and copies of other official and public announcements of the [fol. 48] power program promulgated by TVA are attached hereto, marked Exhibit D, and made a part hereof.

The acknowledged objects and purposes intended to be accomplished by the Defendants through the foregoing program are:

(a) To establish complete public ownership of utility generating, transmission and retail or distribution facilities for electricity in a large area of the Nation;

(b) To establish a policy of rate making which will promote domestic and rural use at the expense of industrial use;

(c) To regulate local intrastate electric rates and service to supplant State regulation of public utilities on the theory that regulation by the States and agencies established by State laws has been inadequate and unsatisfactory;

(d) To establish a "yardstick" to measure the reasonableness of and to regulate the rates of privately owned utilities in or adjoining the area or elsewhere throughout the United States; and

(e) To promote public ownership of utilities throughout the nation as well as within selected area.

Except for the power to be produced through the operation of the facilities at Wilson Dam (which were constructed under the National Defense Act of 1916) to the extent the production and sale of such power has been held lawful and not to exceed the capacity which there existed prior to the doing of any of the acts herein complained of, the power to be produced under the program promulgated by the Defendants is not surplus power incidentally produced by Federal works, but power which is to be deliberately produced by said Defendants for the express purpose of distributing and selling such power as a proprietary business enterprise in the vast territory hereinbefore described, and through actual and threatened direct Federal and Federally subsidized competition, to effecuate Federal regulation of rates and service for intrastate electric service and to promote public ownership of public electric utilities as part of the permanent "National Power Policy."

[fol. 49] Threatened Damage to Complainants Through Power Program Promulgated by Defendants

XVI

The power program promulgated by the Defendants, like that authorized by the Act (which is described in Paragraph XIII supra), will develop 5,000,000 k.w., of firm power and will produce 25 billion kilowatt hours of energy annually. This power program provides for the construction of transmission lines sufficient to service all territory within transmission distance of any generating station. Economical or commercial transmission distance in the present development of the art is 250 miles. Each of the territories served by the Complainants is wholly or in part within 250 miles of some generating plant to be built under the power program promulgated by the Defendants, all as more fully appears on the map marked Exhibit A, attached

hereto, and made a part hereof. The entire consumption of electricity in the area within commercial or economical transmission distance of the generating stations to be constructed under the Defendants' power program is approximately 14 billion kilowatt hours annually or only 56% of the quantity of electricity to be produced by the Defendants under their program. This demand is already fully supplied by the Complainants and other public utilities operating within this area. The facilities of the Complainants and other existing utilities in this area are more than adequate to supply the present consumption of electricity therein and are fully adequate to supply any increase in demand in said territory for a reasonable period in the future; and if and when further facilities should be required, they are ready, willing and able to supply them. There is no need for this power to be produced by the Defendants; and it can be sold, even in part, only through the displacement of the Complainants in the conduct of their respective businesses. The execution of the program promulgated by the Defendants will necessarily and inevitably destroy all or a substantial part of the business and property of each of the Complainants. The promulgation of the program by the Defendants, purporting to act under the Tennessee Valley Authority Act and in the discharge of official duty, threatens to decrease the marketability of the property of each of the Complainants in the threatened area, to depreciate the value of such property, to impair Complainant's ability to refinance maturing obligations and to impair the ability of such Complainants to finance new construction in said area. The promulgation of the program casts a cloud upon the rights of each of the Complainants and threatens each of the Complainants with irreparable injury.

Acts Done by Defendants in Execution of Their Power Program

XVII

Shortly after the promulgation of their power program, the Defendants, with their agents and servants, aggressively entered upon, and ever since have continued the execution of their promulgated program and are now threatening to carry it to completion. In execution of their power

program the Defendants have done and are doing, among other things, the following acts:

(1) They have assumed use, control and possession of Wilson Dam and U. S. Nitrate Plant No. 2 Steam Plant.

(2) They have undertaken the construction of Norris Dam and power plant on the Clinch River, a tributary of the Tennessee River, at a cost of approximately \$36,000,000.

(3) They have undertaken the construction of the Wheeler Dam and power plant located approximately 15 miles above Wilson Dam on the Tennessee River. This dam and power plant will cost approximately \$39,700,000.

(4) They have undertaken the construction of the Pickwick Landing Dam and power development located on the Tennessee River, approximately 50 miles below Wilson Dam. This dam and power development will cost approximately \$35,800,000.

(5) The Defendants have initiated and are proceeding with the construction of the Guntersville Dam and power [fol. 51] project which is located on the Tennessee River near Guntersville, Alabama. This dam and power project will cost approximately \$37,600,000.

(6) The Defendants have selected the site and have authorized the beginning of construction of the Chickamauga Dam and power project on the Tennessee River about 7 miles upstream from Chattanooga. This dam and power project will cost approximately \$41,500,000.

(7) The Defendants have recommended to Congress the construction of the Watts Bar Dam and power project, have tentatively selected its site, and are now engaged in exploratory work at the site. Construction work has been scheduled to start in the near future. This dam and power project is located on the Tennessee River about midway between Knoxville and Chattanooga, and will cost approximately \$40,800,000.

(8) The Defendants have recommended to Congress the construction of the Gilbertsville Dam and power project, and have scheduled its construction to start in the near future, and are now engaged in exploratory work to fix its exact site. This dam and power project is located on the Ten-

nessee River, in Kentucky, approximately 23 miles above the confluence of the Tennessee River with the Ohio. It is estimated to cost \$87,000,000.

(9) The Defendants have recommended to Congress the construction of the Coulter Shoals Dam and power project, have tentatively selected its site and have scheduled its construction to start in the near future. This dam and power project is located on the Tennessee River about 50 miles below Knoxville. It is estimated to cost \$24,400,000.

(10) The Defendants have been authorized by Congress to begin the construction of the Fowler Bend Dam and power project, which is located on the Hiwassee River in Tennessee, 76 miles above the confluence of the Hiwassee with the Tennessee River. It is estimated to cost \$20,400,000.

[fol. 52] (11) The Defendants have recommended to Congress the construction of the Fontana Dam and power project, have selected its site and have scheduled its construction to start in the near future. This dam and power project is located on the Little Tennessee River, in North Carolina, 68 miles above the confluence of the Little Tennessee with the Tennessee River. It is estimated to cost \$42,400,000.

(12) The Defendants have recommended to Congress and have scheduled for commencement in the near future an increase in the height of Wilson Dam, at a cost of \$500,000. The estimated cost of the completed development is \$53,200,000.

(13) The Defendants have recommended to Congress and have scheduled an increase in the height of the Hales Bar Dam, a private dam constructed under Congressional authority by the Chattanooga and Tennessee Power Company, a predecessor of Complainant, The Tennessee Electric Power Company. This increase in height will cost approximately \$4,500,000.

(14) The Defendants have stated in a report to the Congress that provision for the installation of electric generating equipment is being made in the design of all dams under construction or recommended for construction by the defendants.

(15) The above-mentioned ten dams, now under construction or recommended and scheduled for construction, exclu-

sive of Hales Bar, as particularly set forth in the special report of TVA to Congress, March 31, 1936, together with Wilson Dam and the U. S. Nitrate Plant No. 2 Steam Plant, both of which are completed, will have, upon completion with appropriate power installations, a capacity of 1,200,000 kilowatts of firm power and will produce 6,307,000,000 kilowatt-hours of firm energy annually when operated as a coordinated group.

[fol. 53] (16) Defendants have undertaken and are in process of completing works which will increase the firm power which may be developed at Wilson Dam (located at Muscle Shoals, Alabama), over and above that incidentally produced by the lawful construction of the dam under the National Defense Act of 1916, by 175,600 kilowatts of firm capacity, capable of producing 923,100,000 k. w. h. of firm energy annually on the basis of 60% annual load factor (on the basis of 100% annual load factor, these quantities become 94,300 k. w. and 826,100,000 k. w. h.). The firm capacity of Wilson Dam as constructed under the National Defense Act of 1916 and without the increase resulting from the completion of additional works in the Tennessee River or the use of the 60,000 k. w. steam plant at Nitrate Plant No. 2, or other steam plants, is 27,700 k. w., capable of producing 242,600,000 k. w. h. of firm energy annually on the basis of 100% annual load factor (on the basis of 60% annual load factor, those quantities become 27,700 k. w. and 145,600,000 k. w. h.).

Defendants have undertaken and entered into contracts for the supply of electric energy for a period of 20 years to various communities and industrial corporations and have agreed to supply firm power to other and larger cities to a total amount far in excess of the amount of firm power which may be generated at Wilson Dam at its capacity as constructed under the National Defense Act of 1916 and prior to the doing of any of the acts herein complained of.

(17) Each of the territories served by the respective Complainants is wholly, or in large part, within 250 miles of one of the aforesaid dams and generating plants projected by the Defendants, all as more particularly appears from the map marked Exhibit A attached hereto and made a part hereof.

(18) The Defendants have recommended a construction schedule for the foregoing dams which would produce a sys-

tem of eleven completed dams by July 1, 1943. The Defendants [fol. 54] have a large staff engaged in planning this construction program. The Defendants also have surveys under way to determine the most feasible sites for additional dams on the Tennessee and its tributaries, and have a large staff engaged in planning a further dam building program for the future.

(19) Defendants have acquired, constructed, are constructing or contemplate the construction of transmission and rural lines in the States of Mississippi, Tennessee, Alabama and Georgia, which will aggregate more than 3600 miles by July 1937. These lines are shown in part more particularly upon the map marked Exhibit B, attached hereto and made a part hereof.

(20) Upon information and belief Defendants have caused plans to be prepared for the construction of high tension transmission lines from one or more of the dam projects hereinbefore described to or near the city of Chattanooga, Tennessee, the city of Knoxville, Tennessee, the city of Memphis, Tennessee, the city of Nashville, Tennessee, the city of Columbia, Tennessee, the city of Jackson, Mississippi, the city of Meridian, Mississippi, the city of Evansville, Indiana, the city of Cincinnati, Ohio, the city of Louisville, Kentucky, the city of Birmingham, Alabama, the city of Atlanta, Georgia, the city of St. Louis, Missouri, the city of Gadsden, Alabama and other cities.

(21) Upon information and belief the Defendants have a large staff preparing plans for such transmission lines as will be necessary to permit the Tennessee Valley Authority to serve the entire area designated in their promulgated program to the exclusion of all existing privately-owned utilities.

(22) The Defendants have purchased, attempted to purchase or to promote the purchase of retail distribution systems, all franchises, contracts and going business relating to such systems in Knoxville, Tennessee, Memphis, Tennessee, Decatur, Hartselle, Russellville, Courtland, Leighton, Cherokee, Sheffield, Albany, Austinville, Falkville, Tuscumbia, [fol. 55] Florence and Belle Mina, Alabama, and many other cities, municipalities and unincorporated communities in the area designated in their promulgated program.

(23) The Defendants have entered into contracts for the sale of power to Knoxville, Tennessee, Memphis, Tennessee, Bessemer, Alabama, Tarrant City, Alabama, Tupelo, Mississippi, Alcorn County, Mississippi, Mississippi Electric Power Association, Athens, Alabama, New Albany, Mississippi, Pulaski, Tennessee, Pontotoc County, Mississippi, Muscle Shoals, Alabama, Amory, Mississippi, Prentiss, County, Mississippi, Dickson, Tennessee, and other municipalities in the area designated in the promulgated program. In each case Defendants by contract have undertaken to regulate the retail rates for electric service and otherwise to regulate the retail service of electric utilities in said cities and municipalities to the exclusion of the police powers of the states, the powers of their regulatory commissions, or the powers of the municipal subdivisions. Upon information and belief the Defendants have also entered into negotiations with other cities, including Chattanooga, Tennessee and Dalton, Georgia, for similar contracts for the sale of power. In some cases the Defendants have (by duress and coercion exercised as hereinafter more particularly set forth in Paragraph XIX hereof) not merely compelled privately owned utilities to sell certain of their local distribution systems but have by the contract of purchase undertaken, in defiance and disregard of the sovereignty and rights of the States, to control and regulate the rates at which the privately owned utilities should continue to serve in the territory in which the Defendants were temporarily permitting them to remain in business and thereby sought to oust the jurisdiction of the States and of their regulatory Commissions over the rates of such privately owned utilities.

(24) These Defendants have conducted and are still conducting a studied and systematic campaign of propaganda, solicitation, and local political activity in the area designated [fol. 56] in the promulgated program for the purpose of disrupting the established business relations between the Complainants and their customers, destroying the good will and seizing the markets which the Complainants have built up through years of effort and the investment of vast sums of money, and inducing and inciting the residents of communities served by Complainants, under high-pressure propaganda financed with taxpayers' money, to cooperate with the Defendants in their scheme to develop a great federally-owned and operated electric power utility as an absolute

monopoly in the vast territory marked by the Defendants for appropriation. This campaign has been carried on through public addresses of the individual Defendants, personal solicitation by the individual Defendants and their agents, local political activity, radio addresses, magazine articles and dissemination of sensational pamphlets and posters, mailed at taxpayers' expense under Government frank throughout and beyond the area designated in the promulgated program.

In September, October and November of 1933, the defendant Lilienthal made speeches in the principal Cities in the Tennessee Valley and adjacent territory, and particularly in Chattanooga, Tennessee, Memphis, Tennessee, Nashville, Tennessee, and Atlanta, Georgia, in which he enunciated the President's yardstick principle of "regulation through competition" and urged the municipalities throughout the area designated in the promulgated program to cooperate with the Defendants in establishing a great Federally-owned and operated electric utility as an absolute monopoly in the territory. From time to time thereafter in 1933, 1934, 1935 and 1936, the Defendants, Arthur E. Morgan and Lilienthal, continued to make public addresses and to correspond with customers of the Complainants in the Tennessee Valley and elsewhere in behalf of the plan and scheme of the Defendants to carry out the program hereinbefore described. During said period the Defendant Lilienthal, purporting to act as an official representative of and spokesman for the government of the United States, met with various members of the governing bodies of the Cities of Birmingham, Bessemer, Tarrant City, Memphis, Knoxville, Chattanooga, and other cities in the selected area, and urged and incited them forthwith to substitute a publicly-owned local utility distributing TVA power for the local distribution systems of the various complainants.

(25) Since the promulgation of their program the Defendants have consistently attempted, and continue to attempt to coerce and compel the Complainants, as owners of existing facilities, to sell transmission lines and distribution systems at distress prices far below their fair value, even without allowance for severance damages caused to the rest of Complainants' systems under threat that unless Complainants accede to the demands of the Defendants they will

construct, or cause to be constructed, duplicate facilities subsidized in construction and operation by federal funds which the Defendants hold themselves out as having for expenditure at their discretion for such purposes and, by seizing the markets of existing utilities, render the properties of the existing utilities wholly valueless.

(26) The Defendants have caused Bills, designed to forward their power program, to be submitted to the Legislatures of various states in the selected area, and have lobbied, directly or through their agents, for, and brought about, the passage of such Bills. Typical of these Bills are those which Defendants caused to be introduced in and which were subsequently enacted by the Legislature of Tennessee. The character of these statutes is shown by the preambles which are set forth in Exhibit E attached hereto and made a part hereof. For a full statement of these statutes Complainants pray leave to refer to the official laws of the State of Tennessee.

[fol. 58] (27) The Defendants have established TVA offices and installed TVA personnel in various localities throughout the area designated in the promulgated program to disseminate propaganda in behalf of the program of the Defendants even where the TVA is not yet doing any business.

(28) On December 19, 1933 the Electric Home and Farm Authority (a Delaware corporation) was incorporated with the defendant directors of TVA as its sole directors. It was created and used as an instrumentality to promote the realization of the power program of these Defendants. The purpose of the Electric Home and Farm Authority, as directed by the individual Defendants, as its slogan stated, was to proceed toward an "electrified America" and to provide "electricity for all" through the Federal financing of electric consuming devices which might be sold only in those areas in which TVA operated, or in which the rates of the privately-owned utilities had been approved by the Defendants. The Electric Home and Farm Authority, under the direction of the individual Defendants, caused to be made up colorful rotogravure pamphlets which advertised in spectacular and dramatic fashion the TVA construction program and the joys of TVA electricity, and, after having made up these pamphlets, with the aid of costly advertising and pub-

licity experts caused them to be circulated at the expense of Federal taxpayers throughout and beyond the area designated in the power program promulgated by the Defendants. When the legality of Electric Home and Farm Authority, the Delaware corporation organized as an agency of TVA in the promotion of its power program, was called into question, the defendant directors of TVA, in order to avoid a final decision by the Supreme Court, dissolved said Delaware corporation. On August 1, 1935, a successor Electric Home and Farm Authority was incorporated under the laws of the District of Columbia; and since that time said new corporation has been acting with TVA and the individual [fol. 59] Defendants in the promotion of their power program as well as in attempting to regulate and lower rates in other sections of the country.

(29) The Defendants have officially reported to the Congress that merely that phase or part of their power program in active course of development is designed to create a business of producing, transmitting and selling electricity which will yield a gross annual income in excess of \$23,000,000.

(30) Defendants have solicited large industrial customers of some of the Complainants and for the purpose of detaching such customers the Defendants have offered to supply electricity for industrial purposes at arbitrary, non-compensatory, confiscatory and discriminatory rates. They have attempted to persuade customers of Complainants to breach existing contracts. For the purpose of detaching said customers the Defendants have engaged in unfair competition and have offered and made discriminatory rates in violation of the valid laws of the States of Tennessee, Alabama and other States in which the Defendants are operating or seek to operate. The Complainants are unable to meet such unfair competition not only because the rates quoted are non-compensatory and made possible only by subsidies from Federal and State taxpayers, but also because Complainants are forbidden by State law to make discriminatory rates for competitive purposes.

All of the foregoing acts and things have been done by the Defendants in the execution of their power program hereinbefore more particularly described; and said Defendants are threatening to continue, and unless restrained by this Court will continue the execution of said program and

will carry it to completion to the irreparable damage of each of these Complainants.

[fol. 60]

XVIII

The program authorized by the Act and the program promulgated by the Defendants, as applied to the territory involved in this suit, are also severally, as stated in the Tennessee Valley Authority Act (16 U. S. C. 831u, 831v), programs for the "economic and social development of said areas" and "experiments in social and economic planning." The activities of the Defendants in carrying out their program are not even remotely or indirectly related to the regulation of commerce among the States and with foreign Nations. Except with respect to power available at Wilson Dam prior to the doing of any of the acts herein complained of, the program of the Defendants is one of creating by publicity and promise of Federal subsidy an outlet for power deliberately produced as a commercial enterprise to be sold in unlawful and destructive competition with power now available in adequate quantities through the operation of the Complainants.

Complainants are informed by the annual reports of the TVA for the fiscal years ended June 30, 1934 and June 30, 1935, respectively, believe and therefore allege that the Defendant TVA, acting under the direction and control of the individual Defendants, both directly and through the operations of its subsidiary, The Tennessee Valley Associated Cooperatives, Inc., and through the medium of the Electric Home & Farm Authority, is engaged primarily in the business of constructing, developing and placing in operation an electric utility enterprise entirely proprietary in character and in promotion thereof is engaged collaterally in various business enterprises such as the manufacture and distribution of fertilizer in commercial quantities, the conduct of social service projects such as prevention of erosion of lands owned by private individuals, experiments in methods for the production of ceramics, experiments with the diet of individuals residing in the Tennessee Valley, studies of uses to which lands owned by private individuals can be put in order to increase production of crops, research into the matter of possible treated food crops to supple-
[fol. 61] ment standard agriculture, economic and geographical surveys with reference to raw materials existing

in lands owned by private individuals; experiments in demonstrations of scientific domestic cooking on electric ranges and the planning of use of lands in aid of agriculture.

The power program authorized by the Act and the power program promulgated by the Defendants have no real or substantial relation to the improvement of navigation, as an incident to the regulation of commerce and in so far, if at all, as either program is sought to be so justified, it is a sham and pretense. All of the works being built or planned by the Defendants are designed and are of a character primarily and essentially to generate electricity as part of the Power Program hereinbefore described. Any relation whatsoever of the program authorized by the Act or promulgated by the Defendants to the improvement of navigation or provision for national defense is indirect, insubstantial, incidental and remote; and even such indirect, insubstantial, incidental and remote relation, if it exists, is limited to an insignificant fraction of such programs and the activities encompassed by them. The program authorized by the Act and the program promulgated by the Defendants, as they relate to the generation and distribution of electric power through facilities other than Wilson Dam to the extent the production and sale of power at Wilson Dam has been held legal and not to exceed the capacity which there existed prior to the doing of any of the acts herein complained of, is totally unrelated to the improvement of navigation or the provision for national defense; and Complainants are informed by the Defendants and by the President of the United States, believe, and therefore allege that the primary purpose of these programs is to invoke the "yardstick principle" for the purpose of regulating phases of the intrastate utility businesses of Complainants and other privately owned utilities, or the destruction of such privately owned utility businesses, through the medium of publicly owned electric utilities [fol. 62] operating and to operate in competition with the private enterprises of the Complainants and as a matter of policy to promote the public ownership of electric utilities.

Cooperation Between Defendants and Federal Administrator of Public Works to Destroy or Acquire Properties of Complainants at Distress Prices.

XIX

The Defendants have adopted an unlawful plan and have cooperated and threaten to continue to cooperate in the exe-

cution thereof with one Harold L. Ickes, as Administrator of the Federal Administration of Public Works, to carry on a systematic campaign to coerce and intimidate Complainants as owners of distribution systems or transmission lines in municipalities or territory in which TVA desires to seize the market to sell such distribution systems and transmission lines either to TVA, or to the municipalities, at prices arbitrarily fixed by the Defendants and far below the fair value of the property sought to be taken. To effectuate this unlawful plan the Defendants inform owners of the properties desired that unless they sell the property at a price arbitrarily fixed by the Defendants, either TVA or the municipalities will build a duplicate distribution system or transmission system with Federal funds and by competition, so subsidized with Federal funds as to be completely destructive to competitors not having access to the Federal Treasury, render the property of the "recalcitrant" utilities valueless except for junk. To make effective this coercion and intimidation and to secure the property desired for less than fair value, said Ickes, as Administrator of Public Works (acting in some instances in cooperation with the Works Progress Administration) on the request of the Defendants authorizes and announces a gift to the municipality of 30% to 45% of the cost of the duplicate distribution or transmission system and agrees to furnish the balance of the cost out of Federal funds borrowed on the credit of the United States and repayable, if at all, only out of the earnings, if any, of the duplicate plant, all upon condition that [fol. 63] the municipality shall agree to use TVA power and will, as soon as legally possible, oust the existing utility from the municipality.

Allotments of such gifts and "loans" are made available to the municipalities if the utility refuses to surrender its property to the Defendants or their nominees on their own terms; but if and so long as the utility agrees to "sell" its property to the Defendants or the municipality, as the Defendants may elect, at an arbitrary distress price fixed by the Defendants, such allotments are promptly cancelled regardless of the wishes of the municipality. The Defendants, acting in concert with said Ickes, have already applied this policy at Knoxville, Tennessee, Memphis, Tennessee, Florence, Alabama, Bessemer, Alabama, Tarrant City, Alabama, Decatur, Alabama, Sheffield, Alabama, and other cities where

the Defendants have appropriated or sought to appropriate the market for electricity. The Defendants, acting in concert with said Ickes, threaten to continue to apply this policy in acquisition or attempted acquisition of properties of each of the Complainants as the Defendants progressively expand their electric power enterprise in the territories respectively served by the Complainants, which territories are more specifically described in Paragraph VIII, supra.

The Defendants pursuant to the unlawful plan before described have also cooperated and continue to cooperate with the said Ickes and the Federal Administration of Public Works to force municipalities in which TVA desires to appropriate the market for electricity, to agree to purchase of TVA power under threats that otherwise allotments of Federal funds for public works in such municipalities will be denied, or, if already made, will be cancelled. The manner in which both phases of this conspiracy between the Defendants and said Ickes has been and is being carried on and the design and purpose of such conspiracy is illustrated by the telegram dispatched by the said Ickes from Washington, D. C., under date of July 11, 1934, to Honorable Lee Glenn, Mayor of Florence, Alabama. Said telegram reads as follows:

[fol. 64] "Washington, D. C., 1934, July 11.

Hon. Lee Glenn, Mayor, Florence, Ala.

Lilienthal TVA has explained proposal to communities North Alabama whereby Authority will purchase distribution facilities Florence and other communities from Alabama Company, rehabilitate them and turn them back to communities. Also your proposal amend your application such manner Florence purchases existing facilities and uses PWA funds for rehabilitations and extensions. Lilienthal informs me that all other communities in area affected have approved TVA plan, that Florence alone is holding out. Policy Public Works is to support TVA. Its proposal furthers regional operation rural electrification pursuant to President's desires, whereas your proposal impedes that policy. This administration will advance no funds to Florence for expenditures inconsistent TVA plan. It will aid entire region and in our judgment is highly advantageous to you. However allotment and grant will be maintained pending completion transaction between TVA and Alabama

Company. Suggest you promptly take appropriate action accept TVA proposal so that it may exercise option within effective period.

Ickes, Administrator."

The Defendants cooperating in the execution of said unlawful plan with said Ickes are perverting and misusing the power, if any, with which they are vested by the Tennessee Valley Authority Act and the power, if any, with which said Ickes is vested under the National Industrial Recovery Act and the Emergency Relief Appropriation Act, to secure the property of these Complainants at less than fair value and thereby confiscate their property without just compensation and wrongfully to destroy the businesses and good will of these Complainants. Unless these Defendants are enjoined by this Court, they will continue so to conspire with said Ickes and through the unlawful and unconstitutional use of the funds of the United States confiscate the property of the Complainants and cause the Complainants and each of them vast and irreparable injury.

[fol. 65] The Attempted Regulation of Complainants' Rates in Confiscatory

XX

The avowed purpose of the program authorized by the Act and promulgated by the Defendants is to effect a Federal regulation of intrastate electricity rates and service by a so-called "yardstick" method or "regulation by competition." Even if the power to regulate intrastate electric rates were vested in the Federal Government and "regulation by competition" were otherwise a constitutional method of exercising such power, the regulation sought to be imposed by the program authorized by the Act and promulgated by the Defendants is illegal and void in that the so-called yardstick constitutes an illegal and unconstitutional attempt to regulate and fix the rates of privately owned and operated utilities and particularly of the Complainants at the non-compensatory and confiscatory level of the TVA wholesale rate and the TVA regulated and prescribed retail rates, which are respectively made possible only through the subsidization of the TVA operations at the expense of Federal and State taxpayers and the subsidization of the municipal distribution plants by the Federal Treasury, or

through the acquisition of properties of existing utilities at distress prices under the coercion of the Defendants, aided and abetted by said Ickes and the Public Works Administration, as hereinbefore more particularly set forth.

The Defendants seek to regulate the rates of the Complainants by the following so-called yardstick rates. The so-called yardstick for wholesale rates is the TVA wholesale rate. The so-called yardstick for cost of distribution is the amount which TVA arbitrarily fixes and allows municipalities for the cost of local distribution. The so-called yardstick for retail rates is the sum of the TVA wholesale rate to municipalities and the amount which TVA arbitrarily fixes and allows municipalities to add to the TVA wholesale rate to cover the costs of local distribution. Each of such so-called yardsticks is dishonest, unfair, unreasonable and confiscatory as a measure of the rates of these Complainants or other privately owned utilities.

[fol. 66] The so-called TVA yardstick for wholesale rates is dishonest, unfair, unreasonable and confiscatory as a measure of the rates of these Complainants or other privately owned and operated utilities in that it excludes the cost of the major part of the investment necessary to render the service and excludes necessary operating expenses which TVA either ignores or recoups from State and Federal taxpayers instead of from rates in the following respects, among others:

- (1) Under the Act only a minor fraction of the cost of hydroelectric developments and steam power plants built or used by TVA is charged to the development of power. (16 U. S. C. 831m.) Such allocation of cost of hydroelectric developments and steam power plants built or used by TVA as is made to the development of power is insufficient, arbitrary, unreasonable and without any basis in fact. Under the claimed authority of the statute, the defendants have, for illustration, charged nothing to power development out of a total investment of \$125,000,000 at Muscle Shoals. They first announced in public hearings they would charge \$29,000,000 to power, and later reduced this to \$21,000,000, but later stated no allocation to power had as yet been determined. On the other hand, privately owned utilities, including Complainants, are not only required to bear the entire cost of hydroelectric developments but must agree to install

navigation facilities and furnish power for navigation purposes without compensation.

(2) TVA does not charge in operating expenses any return even on the fractional part of the investment allocated to power production. No allowance in operating expenses has been made even for the low bond interest paid by the United States upon the money borrowed by the United States to finance TVA.

(3) TVA is relieved of the cost of securing capital by the simple expedient of using the money out of the United States Treasury and, if it elects, selling bonds to cover the full cost of its projects on the credit of the United States.

[fol. 67] (4) TVA is relieved of all Federal income and excise taxes and of all State property, income, excise and occupational taxes; and in lieu thereof under the Act pays only an insignificant percentage of the gross proceeds received from the sale of power in Alabama and Tennessee, which is arbitrarily fixed and subject to change without the consent of the States. (16 U. S. C. 831 l.) The sum so paid by TVA in lieu of taxes does not exceed one per cent of the taxes paid by Complainants upon property of like value and operations of like magnitude.

(5) TVA is relieved of the cost of insurance or damages commonly covered by Workmen's Compensation Insurance and all such costs are paid from the Federal Treasury. (16 U. S. C. 831b.)

(6) TVA is given a preferential freight rate which is not available to Complainants for the same service; and all of the officials and employees of TVA are given preferential passenger fares.

(7) TVA franks all letters, bills, statements and advertising.

(8) TVA makes only an inadequate allowance for annual depreciation; and in 1935 made no allowance whatever.

(9) TVA is relieved of the expense of complying with State laws and costs of State regulation.

(10) Automobiles and airplanes owned by TVA, and gasoline consumed by them are exempt from all forms of taxes and licenses.

The so-called "yardstick" for measuring the costs of distribution, which is arbitrarily fixed by TVA, is dishonest, unfair, unreasonable and confiscatory as a measure of rates of the Complainants and other privately owned utilities for the reason that it does not include the following costs, among others, necessary for rendering such service:

(1) Sales promotion, auditing, engineering, and local services are furnished to such municipalities by TVA without charge.

(2) Such municipal distribution systems are relieved of all Federal income and excise taxes and of all State property, income, excise and occupational taxes. Such taxes represent a substantial part of the necessary costs of operation of a privately owned distribution system. Even the paper or bookkeeping entry set up by such municipalities in lieu of taxes at the direction of TVA is substantially less than 50% of the tax required to be paid by a privately owned utility upon similar property and operations; and this inadequate bookkeeping figure is not paid out but is available for working capital and new construction.

(3) The capital investment in the municipal distribution systems is arbitrary reduced through gifts from the Federal Treasury of from 30% to 45% of the cost of such distribution systems.

(4) The balance of the capital necessary to construct such municipal distribution systems has been and is being supplied from the Treasury of the United States on the credit of the United States at low interest rates made possible by the use of the credit of the Federal Government and payable, if at all, only out of revenue.

(5) In cases of "loans" and grants for construction of duplicate municipal distribution systems PWA has in some cases stipulated:

"No depreciation charges, taxes, or other items of expense, except normal operating expenses and power and lighting extensions shall be charged against the revenues of this project."

(6) Where the publicly owned distribution system has been acquired from a privately owned utility, the capital has been supplied through loans of Federal funds by the TVA so

that the cost of capital required has been arbitrarily reduced through use of the credit of the United States.

(7) Where municipal distribution systems have been acquired from privately owned utilities, the capital investment has been further reduced by the conspiracy of the Defendants and said Ickes, as herein more particularly set forth, to coerce such privately owned utilities into selling such property at prices arbitrarily fixed by the Defendants and far below fair value under threat of destruction through [fol. 69] cutthroat competition financed at the expense of the Federal Treasury.

(8) In many instances the stated investment in municipal and co-operative distribution plants has been arbitrarily reduced by TVA in pursuance of regulatory powers asserted by it under its contracts so as to accord with rates arbitrarily established and fixed for retail service in such municipalities.

Such a method of rate regulation is unfair, arbitrary, unreasonable and confiscatory and constitutes the taking without just compensation of the property and market of the utilities sought to be regulated in violation of the Fifth Amendment of the Federal Constitution. The Defendants are applying and threaten to continue to apply this method of regulation to the Complainants and, unless the Defendants are enjoined by this Court, they will regulate the rates of Complainants for intrastate electric service by such unfair, dishonest, arbitrary, confiscatory and destructive competition to the irreparable damage of each of these Complainants.

XXI

With full knowledge that the so-called TVA yardstick for wholesale rates and the so-called TVA yardsticks for retail rates in municipalities distributing TVA power were and are dishonest, unreasonable, arbitrary, unfair, non-compensatory, and confiscatory in the respects and for the reasons in Paragraph XX more particularly set forth, the Defendants have through speeches, radio broadcasts and written and oral propaganda, represented to the inhabitants of communities served by the Complainants that such so-called yardsticks were and are fair measures of reasonable and compensatory rates for electric service supplied by the

Complainants and have thereby unfairly, wrongfully and improperly attempted to incite the inhabitants of communities served by Complainants to build publicly-owned systems to use TVA power, to mislead the inhabitants of communities served by the Complainants into believing that [fol. 70] they were and are being charged unreasonable rates for service, to disrupt the good relations existing between the Complainants and their customers, to destroy the good-will built up by Complainants through years of effort and a large investment of money, to destroy the ability of Complainants to finance their businesses, to stir up political agitation against privately-owned utilities and to bring Complainants into disrepute and disfavor in the communities in which they are doing business, all to the end that Defendants by unfair, wrongful and dishonest competition and propaganda may seize for themselves the market created and developed by the Complainants over a long period of years.

Defendants' Program and Acts Unauthorized or Unconstitutional

XXII

The acts done and threatened by the Defendants, as hereinbefore more particularly described, are all in furtherance of the doing of business by the TVA as an electric utility in a proprietary capacity in the various States in which some part of the area covered by the promulgated program is situated, without any lawful franchise, any certificate of convenience and necessity or any occupational license. In conducting this proprietary utility business, the Defendants deny the sovereignty of the various States in which the business is carried on or is to be carried on, refuse to submit to the regulation or control of said States or any of them, refuse to pay occupational or other taxes imposed by said States upon the privilege of carrying on a utility business in said States and refuse to comply with any of the laws of any of said States regulating or relating to public utilities or the carrying on of the business of a public utility.

XXIII

Defendants, purporting to proceed under the Tennessee Valley Authority Act aforesaid, further threaten illegal

and unlawful competition with Complainants and each of [fol. 71] them by engaging in a private and proprietary business, not governmental or national in character, not interstate, and not essential or necessary to the discharge of any constitutional federal function, contrary to and in defiance and disregard of and without compliance with the laws of the several States in which Complainants severally do business, particularly, (1) valid state laws regulating the rates and service of public utilities engaged in the business of generating, transmitting, and distributing electric light and power; (2) valid state laws relating to foreign corporations doing business within their limits; (3) valid state laws imposing franchise, license, real estate, and other taxes on such corporations; (4) valid state laws forbidding or regulating monopoly, restraint of trade, and unfair competition.

XXIV

Many of the acts of the Defendants herein complained of including particularly those set forth in Paragraph XIX hereof are not in terms authorized by the Tennessee Valley Authority Act of 1933, as amended, or by any other law.

XXV

The Tennessee Valley Authority Act of 1933 as amended, (insofar as it attempts to authorize the power program described in said Act and the power program and acts of the Defendants hereinbefore set forth), the program described by said Act, the program promulgated by the Defendants, and the things done, being done, and threatened by said Defendants in furtherance of said programs and in reliance upon the said Act, are severally unlawful, unconstitutional and void for the following reasons:

(1) Neither said Act, the power program authorized by said Act, the power program promulgated by the Defendants, nor the things done, being done, or threatened by the Defendants in pursuance of said programs and in reliance upon said Act are authorized by any power delegated to the Federal Government by the Constitution or any of its amendments.

[fol. 72] (2) The Tennessee Valley Authority Act of 1933 as amended, the power program sought to be authorized by that Act, the power program promulgated and sought to

be carried out by the Defendants, and the things done, being done, and threatened, in the execution of said act and of said programs, severally attempt to extend Federal power over matters of intrastate commerce and local police power, and particularly over the regulation of intrastate public utilities, including the Complainants, in contravention of the Ninth and Tenth Amendments to the Constitution of the United States, and severally constitute the taking of property of the Complainants in violation of the Fifth Amendment to the Federal Constitution.

(3) The Tennessee Valley Authority Act fails to indicate or establish any adequate legislative standard to guide the administrative officers charged with the administration of said Act, but, on the contrary, attempts unlawfully to delegate legislative power to the President of the United States and such administrative officers, including the Defendants herein, in violation of Article I, Section 1, Article II, Section 8, Clauses 1, 2, and 18, and Article II, Section 1 of the Constitution of the United States. The Act seeks to delegate to the individual Defendants the uncontrolled and unguided discretion to do whatever they may think best in the matter of development of water power and in the matter of social and economic planning in the Tennessee Valley and adjacent territory and in the regulation of electric rates.

(4) The Tennessee Valley Authority Act fails to provide for any hearing for persons whose rights will be injured and whose property will be taken by the Defendants and, as construed and applied by the Defendants, attempts to provide for the extra-legal condemnation and appropriation of property of the Complainants and thereby denies to Complainants due process of law as a matter of procedure in violation of the Fifth Amendment to the Constitution of the United States.

[fol. 73] (5) The Tennessee Valley Authority Act of 1933, as construed and applied by the Defendants, the power program authorized by the Act and the power program promulgated by the Defendants severally seek to regulate the rates of Complainants for electric utility service through Federally subsidized competition so that the rates of Complainants shall be fixed without evidence, without a hearing, and without the opportunity for judicial examination and re-

view to determine the reasonableness or unreasonableness of said rates and thereby deny the Complainants due process of law as a matter of procedure in violation of the Fifth Amendment to the Federal Constitution.

Damages; No Remedy at Law

XXVI

As hereinbefore more fully appears, the mere existence of the Tennessee Valley Authority Act as an ostensibly constitutional and valid statute, the power program authorized by that Act, the power program promulgated by the Defendants, the acts done and threatened by the Defendants in furtherance and execution of their power program severally threaten each of the Complainants with irreparable injury. The execution of the power program authorized by the Act or the power program promulgated by the Defendants will necessarily and inevitably destroy all or a substantial part of the business and property of each of the Complainants. Many of Complainants, as hereinbefore more particularly alleged in Paragraph VIII hereof, own and operate transportation lines and facilities, gas properties with plants and mains for serving natural and artificial gas to their respective customers, and water and ice plants with appurtenant equipment for delivery and service, all of which properties and the businesses connected therewith, in each case are managed and carried on as an integrated business. These related and interdependent enterprises and businesses are valuable assets to the respective Complainants, represent [fol. 74] ing many millions of dollars in invested capital, and supply profitable uses for otherwise surplus power capacity. Their operation as an integrated business results in economies of operation which reduce the cost of carrying on each of such activities as well as the cost of carrying on the electric business. The loss or destruction of such Complainants' electrical and power businesses would deprive them of the economies of such integrated operation and would greatly damage, if not destroy, the value of the aforesaid properties and businesses which have been developed as adjuncts thereto. The acts of the Defendants thus directly threaten substantial damages to the non-electric as well as the electric business and property of each of the Complainants. The acts of the Defendants, done and threatened as hereinbefore more particularly set forth,

threaten irreparable damage to each of the Complainants. The mere existence of the Tennessee Valley Authority Act as an ostensibly valid statute and the promulgation of the program of the Defendants purporting to act pursuant to and in discharge of their duty under that Act threatens to decrease the marketability of the property of each of the Complainants in the threatened area, to depreciate the value of such property, to impair the ability of Complainants to refinance maturing obligations and to impair the ability of the Complainants to finance new construction in the threatened area. The acts and threats of the Defendants cast a cloud upon the franchises, businesses and properties of each of the Complainants. Unless these Defendants are enjoined, the Complainants will severally suffer vast and irreparable injury as hereinbefore more specifically set forth, for which they severally have and can have no adequate remedy at law.

Prayer

Wherefore, the Complainants pray:

(1) That process issue against the Defendants requiring them and each of them to answer this Bill, but not under oath or affirmation, the benefit thereof being hereby expressly waived by the Complainants.

[fol. 75] (2) That this Court, upon the final hearing hereof, shall adjudge and decree that the Tennessee Valley Authority Act of 1933, as amended, the power program authorized by said Act, and the power program promulgated by the Defendants are severally in violation of the Constitution of the United States in the circumstances and particulars hereinbefore set forth and in so far as they undertake to authorize the Defendants to perform and engage in the acts and practices of which complaint is made.

(3) That this Court shall, by its final judgment, enjoin Defendants, their agents and employees, separately and severally:

(a) From further executing the Tennessee Valley Authority Act of 1933, the power program authorized by said Act or the power program promulgated by the Defendants.

(b) From purchasing, constructing or otherwise acquiring works for the purpose of creating a supply of electric

power for use in carrying on a Federally owned electric public utility.

(c) From disposing of electricity generated at dams or other works constructed by or on behalf of the United States (whether valid structures or not) so as to establish the United States in the industry or business of producing, transmitting and selling electric power as a proprietary, commercial and competitive venture, and so as to draw to the Federal Government the conduct and management of such business.

(d) From disposing of electric energy generated at dams or other works constructed by or on behalf of the United States (whether valid structures or not) for the private benefit of certain classes of the people or for the private benefit of a group of people living in certain areas of the Nation.

(e) From disposing of electricity generated at dams or other works constructed by or on behalf of the United States (whether valid structures or not) so as to regulate and control rates and service for intrastate electric utilities, pro-[fol. 76] mote public ownership of such utilities, or otherwise govern the concerns reserved to the States.

(f) From constructing, purchasing or otherwise acquiring hydro-electric plants, electric generating stations, electric transmission lines, electric distribution systems or other power facilities, except (1) such transmission lines as may be necessary and appropriate for the transmission of power generated at Wilson Dam to the extent the production and sale of power at Wilson Dam has been held legal and not to exceed the capacity which there existed as the dam was constructed under the National Defense Act of 1916 and before the performance of any of the acts complained of in the foregoing Bill and (2) then only upon payment to the Complainants of just compensation for any markets now supplied by, or for any other property of, the Complainants, which the Defendants may take in disposing of such power from Wilson Dam.

(g) From selling electric energy produced by water power or steam, except (1) such energy as may be produced by Wilson Dam to the extent the production and sale

of power at Wilson Dam has been held legal and not to exceed the capacity as the dam was constructed under the National Defense Act of 1916 and under the conditions there existing before the performance of any of the acts complained of in the foregoing Bill and (2) then only upon payment to the Complainants of just compensation for any markets now supplied by, or for any other property of, the Complainants, which the Defendants may take in disposing of such energy produced by Wilson Dam.

(h) From carrying on a campaign of organized propaganda, at Federal expense, to promote public ownership and operation of electric utilities under contract or in privity with TVA or dominated by TVA.

(i) From carrying on a campaign to promote public ownership and operation of electric utilities in municipalities or territory served by the Complainants or any of them.

[fol. 77] (j) From regulating the rates or service of municipal electric utilities in the territory served by Complainants or any of them through contract, purchase, economic coercion, or otherwise.

(k) From providing management, sales, engineering and other free services to Complainants' competitors.

(l) From interfering with or disrupting the business, service, contract or utility relations of the Complainants or any of them with the design and purpose of promoting a policy of public ownership or of carrying out a program of regulation of rates and service by yardsticks or competition.

(m) From selling electricity in unfair competition with the Complainants or any of them through establishment of rates less than the cost of service under the subsidization of State and Federal taxpayers.

(n) From using Federal funds to construct or purchase electric utility distribution systems either for direct operation as a public utility by TVA or for transfer to municipalities to be operated under control of rates and service by TVA.

(o) From regulating or attempting to regulate the rates or service of Complainants or any of them through the

establishment of so-called "yardsticks" or through competition subsidized by the Federal Treasury and by exemption from State and Federal taxes.

(p) From confederating and acting in concert with Harold L. Ickes, as Administrator of Public Works, to induce and persuade municipalities served by the Complainants or any of them, to construct duplicate facilities, to control the rates of municipalities receiving allotments from the PWA as part of the "national power policy" to regulate and lower intrastate rates for electric service, to disrupt the business, service, contract or utility relations existing between the Complainants or any of them and their customers.

(q) From carrying on political agitation to persuade municipalities served by the Complainants or any of them to [fol. 78] hold elections to determine the question of municipal ownership and operation of electric public utilities in said municipalities and from unfair and unwarranted interference with the businesses of the Complainants or any of them.

(r) From engaging in the business of electric public utility in any of the territories served by any of the Complainants.

(s) From supplying the markets and customers now being supplied by any of the Complainants or any customers in the area now served by any of Complainants.

(t) From engaging in the business of an electric public utility in any of the territories served by any of the Complainants without complying with the State laws regulating the establishment and conduct of the business of a public utility therein, the State laws regulating the doing of business in said states by a foreign corporation or any of the State laws forbidding or regulating monopoly, restraint of trade and unfair competition.

(u) From engaging in any way in practices which constitute unfair competition with any of the Complainants in territory served by them.

(4) That this Court shall by its final decree grant such other and further relief whether herein specifically prayed for or not as right and justice shall require and as to this Court shall seem meet, just and proper.

(5) This is the first application for injunction or other extraordinary relief in this cause.

Frantz, McConnell & Seymour, 700 Burwell Building, Knoxville, Tennessee; Trabue, Hume & Armistead, American Trust Building, Nashville, Tennessee; Baker, Hostetler, Sidlo & Patterson, Union Trust Building, Cleveland, Ohio, Solicitors for Complainants.

[fols. 79-80] *Duly sworn to by R. W. Lamar. Jurat omitted in printing.*

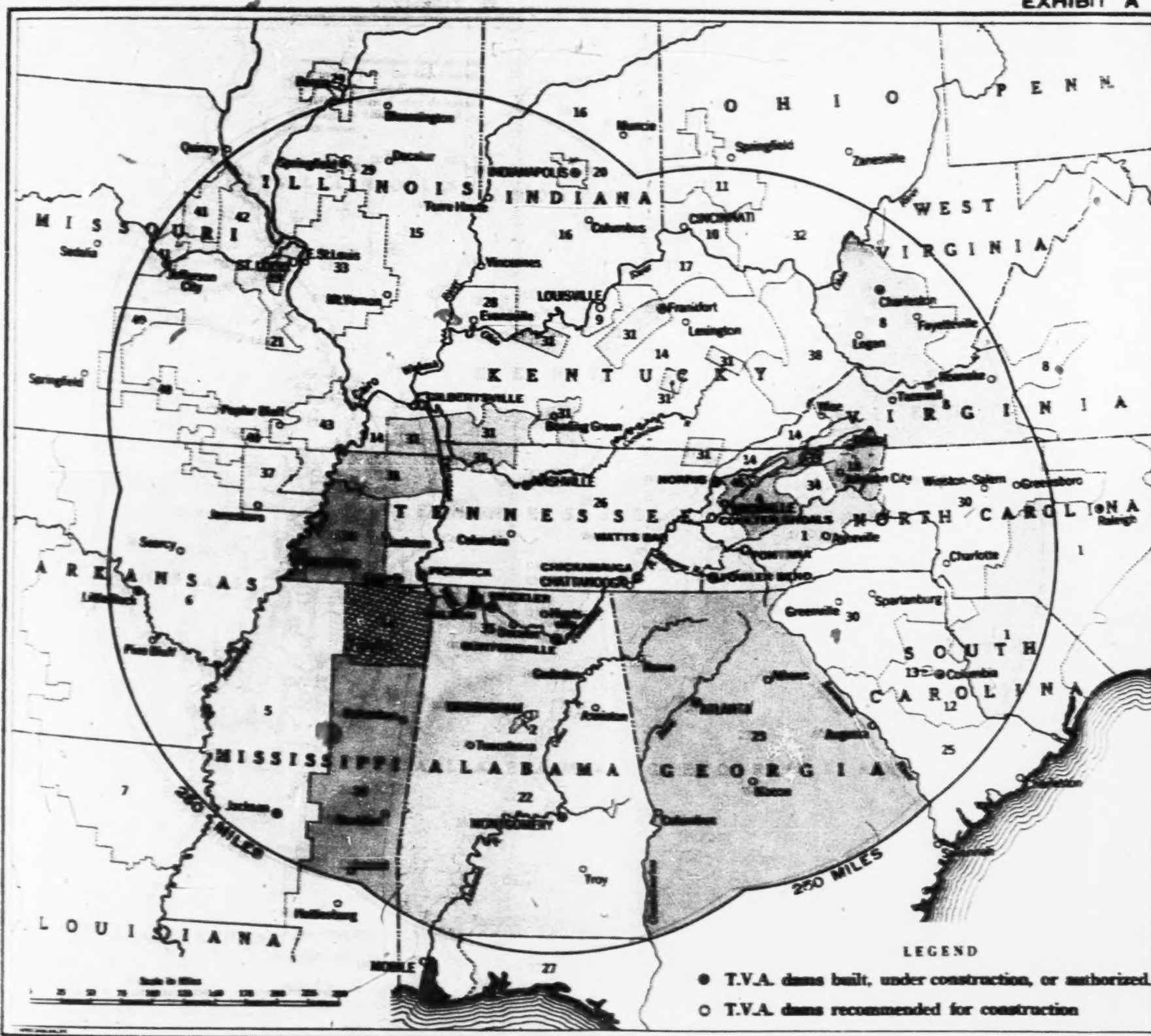
(Here follow two maps, Exhibits A and B, side folios 81
and 82)

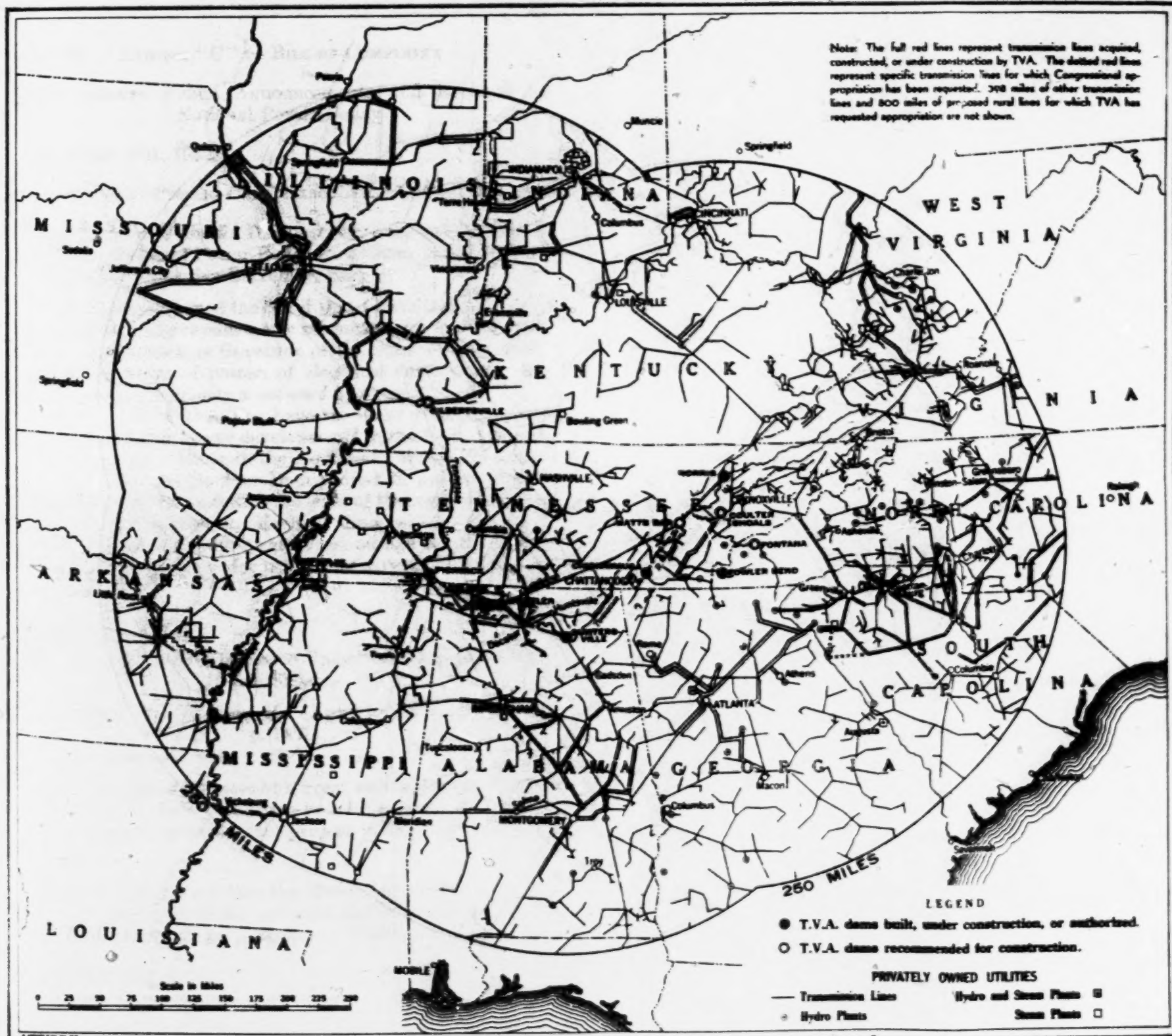
EXHIBIT A

1. Carolina Power & Light Company
2. Birmingham Electric Company
3. Memphis Power & Light Company
4. Tennessee Public Service Company
5. Mississippi Power & Light Company
6. Arkansas Power & Light Company
7. Louisiana Power & Light Company
8. Appalachian Electric Power Company
9. Louisville Gas and Electric Company
10. The Cincinnati Gas and Electric Company
11. The Dayton Power and Light Company
12. Broad River Power Company
13. Lexington Water Power Company
14. Kentucky Utilities Company
15. Central Illinois Public Service Company
16. Public Service Company of Indiana
17. Kentucky Power & Light Company
18. East Tennessee Light & Power Company
19. Laclede Power & Light Company
20. Indianapolis Power & Light Company
21. Union Electric Light and Power Company
22. Alabama Power Company
23. Georgia Power Company
24. Mississippi Power Company
25. South Carolina Power Company
26. The Tennessee Electric Power Company
27. Gulf Power Company
28. Southern Indiana Gas and Electric Company
29. Central Illinois Light Company
30. Duke Power Company
31. Kentucky-Tennessee Light & Power Co.
32. The Southern Ohio Electric Company
33. Illinois Power and Light Corporation
34. Tennessee Eastern Electric Company
35. Southern Tennessee Power Company
36. West Tennessee Power & Light Company
37. Arkansas-Missouri Power Company
38. Kentucky & West Virginia Power Company, Inc.
39. Kingsport Utilities, Inc.
40. Missouri Electric Power Company
41. Missouri Power & Light Company
42. East Missouri Power Company
43. Missouri Utilities Company
44. Tennessee Valley Authority
45. Hudson River Electric Company

† Companies thus designated are complainants

Note—
Each company in the foregoing list is numbered to correspond with its service area number on the map.





[fol. 83] EXHIBIT "C" TO BILL OF COMPLAINT

Representative Public Announcements and Releases re
National Power Policy

1. September 21, 1932.

Speech of Present Chief Executive. At Portland

Power Views of Franklin D. Roosevelt, compiled November 1934 for National Power Policy Committee, by Joel David Wolfsohn, Executive Secretary, page 8

"I have strengthened the belief that I have had for a long time, and that I have constantly set forth in my speeches and papers in my work as Governor of the State of New York, that the question of power, of electrical development and distribution is primarily a *national* problem." • • •

"• • • Here then you have the clear picture of four great government power developments in the United States, the St. Lawrence River in the Northeast, Muscle Shoals in the Southeast, the Boulder Dam project in the Southwest, and, finally, but by no means the least of them, the Columbia River in the northwest. Each of these will be forever a national yardstick to prevent extortion against the public and to encourage the wider use of that servant of the people—electricity."

2. April 10, 1933.

Executive Message. Tennessee Valley Development—Muscle Shoals

(House Doc. No. 15, Cong. Rec. April 10, 1933, p. 1423; id., p. 1451)

"To the Congress:

"The continued idleness of a great *national investment* in the Tennessee Valley leads me to ask Congress for legislation necessary to enlist this project in the service of the people.

[fol. 84] "It is clear that the Muscle Shoals development is but a small part of the potential public usefulness of the entire Tennessee River. Such use, if envisioned in its en-

Emphasis ours.

tirety, transcends mere power development: it enters the wide fields of flood control, soil erosion, afforestation, elimination from agricultural use of marginal lands, and distribution and diversification of industry. In short, this power development of war days leads logically to national planning for a complete river watershed involving many States and the future lives and welfare of millions. It touches and gives life to all forms of human concerns.

"I, therefore, suggest to the Congress legislation to create a Tennessee Valley Authority—a corporation clothed with the power of Government but possessed of the flexibility and initiative of a private enterprise. It should be charged with the broadest duty of planning for the proper use, conservation, and development of the natural resources of the Tennessee River drainage basin and its adjoining territory for the general social and economic welfare of the Nation. This authority should also be clothed with the necessary power to carry these plans into effect. Its duty should be the rehabilitation of the Muscle Shoals development and the co-ordination of it with the wider plan.

"Many hard lessons have taught us the human waste that results from lack of planning. Here and there a few wise cities and counties have looked ahead and planned. But our Nation has 'just grown.' It is time to extend planning to a wider field, in this instance comprehending in one great project many States directly concerned with the basin of one of our greatest rivers.

"This in a true sense is a return to the spirit and vision of the pioneer. If we are successful here we can march on, step by step, in a like development of other great natural territorial units within our borders."

[fol. 85] 3. 1933

Thirteenth Annual Report of the Federal Power Commission, p. IX

• • • Pursuant to an Executive order of the President (Executive Order No. 6251, Aug. 19, 1933, under title II of the National Industrial Recovery Act), the Commission has undertaken a survey of the water resources of the nation as they relate to the conservation, development, control, and utilization of water power and of the relation of water power

to other industries and to interstate and foreign commerce. The allocation of necessary funds available under the public works section of the National Industrial Recovery Act for this purpose permits the Commission to make an investigation prescribed by section 4 (a) of the Federal Water Power Act, which heretofore has not been possible for lack of necessary funds.

"On the basis of this survey the Commission is directed to assist the Federal Emergency Administrator of Public Works in formulating a *comprehensive program of public works pertaining to the development of water power and the transmission of electrical energy*. Under authority of this Executive order, the Commission has also instituted an investigation of the cost of the transmission of electrical energy in the United States and its distribution to consumers, this being in harmony with the purpose of Senate Resolution 80, introduced by Senator Costigan. A still further duty imposed by this Executive order upon the Commission is that of investigating and reporting upon applications for loans referred to it by the Federal Emergency Administrator of Public Works for construction of public-works projects involving the development and utilization of electric power. In order to assist in expediting the national recovery program, the Commission has given immediate consideration to such applications in reporting on the engineering and economic aspects of the proposed projects."

[fol. 86] 4. August 15, 1933.

Arthur E. Morgan, N. B. C. Radio Address, TVA Press Release, August 16, 1933

"This picture of the Tennessee River drainage area is in many respects typical of many rural areas in America. In so far as the efforts of the Tennessee Valley Authority are successful, they may serve as *precedents for other regions*."

5. September, 1933.

Arthur E. Morgan, Planning in the Tennessee Valley, Current History, September, 1933, p. 663

"If the act is at fault in the uneven emphasis given to various subjects, that can be corrected by the type of organization set up. The Tennessee Valley Authority is

a corporation, administered by a board of three directors who *report directly to the President, and are chiefly subject to his control. Under his direction* it is their function to bring design and proportion into the affairs of the corporation and to insure that a smoothly operating and well-matured program shall emerge to express the dominant purpose of the act." (Page 664.)

6. October 17, 1933.

Lilienthal, Memphis. TVA Press Release, October 17, 1933

"Seated before an open fire in his home in Warm Springs last February, Franklin D. Roosevelt formulated and expressed *a new national policy* for the development of the resources of our country. In one of his first informal conversations with the people, he told of his plan for the development of the Tennessee River Valley—a plan which marks the beginning of a new departure in American economic and political history.

.

"The Authority is not engaged in a punitive expedition against the utilities. The Authority is an instrument of the people of the United States. It is charged with the [fol. 87] duty of carrying out *a national power policy*, and the safeguarding of the public interest in the country's greatest resource, profoundly affecting the future development and prosperity of our country, and all of its people. This policy has not been formulated over night. It is not a mere political accident. It represents more than a decade of careful consideration. It has been thoroughly debated in the Congress of the United States; it has been *sponsored by the President of the United States*. The power program of the Authority is *an integral part of a larger policy* for the economic development of the United States.

.

"The Authority must carry out *the national policy* entrusted to it. It must acquire a market for its power. It must work toward a wider use of electricity in the home, the farm and the factory.

.

"As a new neighbor of yours, I appeal to you not to permit this opportunity for *national leadership* to fail through any lack of your support. I appeal to you to refuse to listen to the voices of those of little vision and of selfish purpose. This program will succeed only if you of the area treat this as a national project. I appeal to you to throw your energies and devotion into *this national program* which can mean so much to you and to your children."

7. November 10, 1933.

Lilienthal, Atlanta. TVA Press Release November 11, 1933

"The Tennessee Valley Authority Act marks the beginning of a *new national power policy and national power program*. This new national policy has two major objectives. The first objective is more effective protection of the public interest, by the setting up of a measure of public operation of power as a 'yardstick.' The second objective of this new national policy is a greatly increased use of electricity in the homes, the farms, and the factories of the United States—an electrified America.

[fol. 88] "The President and the Congress have set themselves to the task of putting to work the vast sources of electricity which lie idle and unused. We are working toward no less a goal than the *electrification of America*. The plans have been laid. Legal authority is ample. The economic difficulties can be overcome. The project is practical and feasible. The program can be carried out. Within the next decade it lies within the power of the people of the United States to make electricity in very truth the servant of the average man and woman in the homes, farms and places of business of this country.

"The power program of the Authority is a crucial part of its plans for immediate action and of the long range program for the development of this region. This power program is of particular interest not only within the Valley, but it has and is intended to have a *national significance*. For the problems which center about the power question here in the southeastern region of the United States are questions not peculiar to this area, but which are *common to the country as a whole*.

.

"So much for the first objective of the Tennessee Valley Authority—the regulatory, public control purpose of this *national power policy*. We come then to the second objective, of at least equal significance.

"The power program of Congress and the President has as its major objective a constantly wider use of electricity. The goal of this *national power policy* is a constructive one: it is nothing less than the electrification of the homes and farms of the United States. It is for the Authority to lead the way through the tangle of engineering obstacles and of economic difficulties which obstruct the path to a genuinely widespread use of this great resource of electricity. I know something of the difficulties which lie ahead. This is not an academic exercise; it is not going to be a Sunday School picnic. We have been advised on the business problems which have to be surmounted. We know something of the engineering difficulties; of the problems of rising costs of transmission; of the problems of water control; of the difficulties of unfavorable peak loads. There is a serious problem of changing our custom of doing things. But in spite of all the difficulties, I am convinced that this objective of *an electrified America* is no mere Utopian dream. It can aid in the program of re-employment and national recovery toward which slowly but surely the American people, under the leadership of President Roosevelt, are moving.

.

"Looking at the country as a whole, without respect to public operation or private operation, it is perfectly evident that we now have and soon will have a tremendous surplus supply of electricity. Within the area of the Tennessee Valley, for example, privately owned electric companies have generating and transmission facilities which can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. . . . Out in Colorado, Boulder Dam is rapidly being carried toward completion at a total cost of \$165,000,000. Boulder Dam on completion in 1937 will add to the nation's annual supply of electrical energy 4,330,000,000 KWH. At Grand Coulee on the Columbia River and at Bonneville in Oregon are two giant power developments which are under way, estimated to cost another \$100,-

000,000. The State of New York and the Dominion of Canada are making plans for a giant power development on the St. Lawrence River with an installed capacity of 2,200,000 H.P."

8. December 6, 1933.

A. E. Morgan, "*Tennessee Valley Authority Opens a New Era of Social Planning*," Premier Rayon Review. (Page 6)

"* * * Finally, in 1933, at President Roosevelt's suggestion, provision for the public ownership and operation of Muscle Shoals was incorporated in the Tennessee Valley Authority law. This provision may make possible the carrying out of one of *President Roosevelt's policies*, that of providing a publicly owned and operated power system as a 'yardstick' by which to measure the relative economy and efficiency of public and private ownership and operation.

"The present program calls for the construction of the Cove Creek Dam on the Clinch River, renamed the Norris [fol. 90] Dam. This dam will store 3,000,000 acre-feet of water and will more than double the prime power available at Muscle Shoals and at other dams on the Tennessee River."

9. January, 1934.

Lillienthal. "*Electrification of America*," House Furnishing Review, page 52

"The power program of Congress and the President has as its major objective a constantly wider use of electricity. The goal of this *national power policy* is a constructive one; it is nothing less than the electrification of the homes and farms of the United States. It is for the Authority to lead the way through the tangle of engineering obstacles and of economic difficulties which obstruct the path to a genuinely widespread use of this great resource of electricity. * * *

"The electric industry, both privately and publicly-owned, is running into a financial blind alley unless the use of electricity can be very substantially increased within the next three years. The plain fact is that the use of electricity has

fallen behind the installation of power generating facilities. This is true, almost without exception, *throughout the country.*"

10. January 20, 1934.

Lilienthal. Washington Radio Address, TVA Press Release

.

"The Tennessee Valley Authority from its offices at Muscle Shoals, Alabama, or Knoxville, Tennessee, will be glad to supply information or answer inquiries not only from the Tennessee Valley area, *but in any part of the country, concerning the Federal Government's plan* of bringing about a more comfortable and convenient home—through the use of the great national resource of electricity."

[fol. 91] 11. January 29, 1934.

A. E. Morgan, Washington. TVA Press Release, February 7, 1934

.

"The Tennessee Valley Authority is the expression of a desire on the part of the President and Congress to work out in a limited area principles of *social and economic planning* which can later have application on a *wider scale*.
• • •"

12. February, 1934.

Lilienthal. "*Lower Power Rates Mean More Appliance Sales.*" House Furnishing Review, page 50

"Second: The revision downward of electric rates. In my considered judgment the greatest single obstacle in the way of a widespread use of electricity has been the rates which have been charged for electricity. We believe that, with notable exceptions, the rates for electricity *throughout the United States* constitute a barrier between the people and the great resource of electricity. A drastic revision downward of electric rates is an essential part of this program. • • •"

13. February 6, 1934.

Dr. H. A. Morgan, Chattanooga. TVA Press Release

"State experiments, associated with the problems of agricultural home life and, to some extent, industry, have been in progress for many years. The Tennessee Valley Authority enterprise, however, is a new departure in our economic and political procedure. It is *national in its conception*, and is the first of its kind to be undertaken by any nation for the study of regional problems of nation-wide application.

"The 'yardstick' is to be applied to problems of the country's resources in order to determine more definitely the public's obligation to them and their place in a *national policy* of economic and social planning. . . ."

[fol. 92] 14. March, 1934.

Morgan. "*Bench-Marks in the Tennessee Valley, II a Birch Rod in the National Cupboard*" 23 Survey Graphic 105, (pp. 109-110)

" . . . President Roosevelt has suggested a course to pursue. He said in his Portland speech in September, 1932:

"I therefore lay down the following principle: That where a community, a city, or county, or a district, is not satisfied with the service rendered or the rates charged by the private utility, it has the undeniable right as one of its functions of government, one of its functions of home rule, to set up, after a fair referendum has been taken, its own governmentally owned and operated service.

"That right has been recognized in most of the states of the Union. Its general recognition by every state will hasten the day of better service and lower rates.

"It is perfectly clear to me and to every thinking citizen that no community which is sure that it is now being served well and at reasonable rates by a private-utility company will seek to build or operate its own plant.

"But on the other hand, the very fact that a community can, by vote of the electorate, create a yardstick of its

own, will, in most cases, guarantee good service and low rates to its population. I might call the right of the people to own and operate their own utility a "birch rod in the cupboard, to be taken out and used only when the child gets beyond the point where mere scolding does any good."

"That is the principle that applies to communities. I would apply the same principles to the federal and state government.

"State-owned or federal-owned power sites can and should properly be developed by government itself. When so developed, private capital should be given the first opportunity to transmit and distribute the power on the basis of the best service and the lowest rates to give a reasonable profit only.

"The right of the federal government and state governments to go further and to transmit and distribute where reasonable and good service is refused by private capital [fol. 93] gives to government, viz., the people, that same very essential "birch rod" in the cupboard."

"And here we come to the significance of public generation and sale of power in the area of the Tennessee Valley Authority. * * *

15. April 24, 1934.

Lilienthal, Boston. TVA Press Release April 25, 1934

"The Authority is charged with the duty of carrying out a national power policy, and the safeguarding of the public interest in the Country's greatest resource."

"* * * The Power program of the Authority is an integral part of a larger policy for the economic development of the United States."

16. May 17, 1934.

Lilienthal, New York City. NA Press Release

"We have been given a *national power policy* to execute in the Tennessee Valley. * * * It answers an overwhelming public demand, after a decade of experience injurious to both investors and consumers."

17. June 22, 1934.

Lilienthal, Jackson. TVA Press Release

"The Tennessee Valley project translates into concrete form a *vision of President Roosevelt*. The project was born in his mind, and it is being carried forward under his guidance. It is a part of a program for *national development*. It is not a local project. Its implications extend to the *outermost reaches of this country*."

18. July 9, 1934.

Letter of President Roosevelt Creating the National Power Policy Committee

Power Views of Franklin D. Roosevelt, compiled November 1934 for National Power Policy Committee, by Joel David Wolfsohn, Executive Secretary, page 17.

"I wish to establish in the Public Works Administration a Committee to be called the '*National Power Policy Committee*.' Its duty will be to develop a plan for the closer co-operation of the several factors in our electrical power supply—both public and private—whereby national policy in power matters may be unified and electricity be made more broadly available at cheaper rates to industry, to domestic and, particularly, to agricultural consumers.

"Several agencies of the government, such as the Federal Power and Trade Commissions, have in process surveys and reports useful in this connection. The Mississippi Valley Committee of Public Works is making studies of the feasibility of power in connection with water storage, flood control and navigation projects. The War Department and Bureau of Reclamation have under construction great hydroelectric plants. Representatives of these agencies have been asked to serve on the committee. It is not to be merely a fact-finding body, but rather one for the development and unification of national power policy.

.

"It is not thought that it will be necessary to have frequent meetings of the full Committee. An adequate administrative staff will be provided, and personal expenses of the members of the Committee in connection with its meetings will be met.

"The Committee is to be advisory to the President."

19. August 5, 1934.

Speech of President Roosevelt at Grand Coulee, Washington

Power Views of Franklin D. Roosevelt, compiled November 1934 for National Power Policy Committee, by Joel David Wolfsohn, Executive Secretary, page 18.

"* * * It is going to affect not only the Columbia River Basin, *but it is going to affect all mountain States and the Pacific Coast territory*, and we are going to see, I believe, with our own eyes, electricity and power made so cheap that they will become a standard article of use, not only for agriculture and manufacturing, but also for every home within reach of an electric light line.

[fol. 95] "The experience of those sections of the world that have cheap power proves very conclusively that the cheaper the power the more of it is used—the more of it is used in home and small businesses; and that makes me believe that this low dam which we are undertaking at the present time is going to justify its existence before it is completed by your being able to contract for the sale of practically all of the power it will develop * * *"

20. November 18, 1934.

Speech of President Roosevelt at Topelo, Mississippi

Power Views of Franklin D. Roosevelt, compiled November 1934 for National Power Policy Committee, by Joel David Wolfsohn, Executive Secretary, pages 19-20.

* * * * *

"I suppose that you good people know a great deal more of the efforts that we have been making in regard to the work of the Tennessee Valley Authority than I do, because you have seen its application in your counties and your own towns and your own homes, and, therefore, it will be like carrying coals to Newcastle for me to tell you about what has been done.

"But perhaps in referring to it I can use you as a text—a text that may be useful to many other parts of the Nation, *because people's eyes are upon you and because what you are doing here is going to be copied in every State in the Union before we get through.*

"We recognize that there will be a certain amount of—what shall I say?—rugged opposition to this development, but I think we recognize also that the opposition is fading as the weeks and months go by, fading in the light of practical experience."

21. June, 1935.

Ickes, "*Back to Work*"

"In addition to the fundamental studies which are being made by the Federal Power Commission by means of its PWA financing, a grant of \$100,000 was made at the President's suggestion to the *National Power Policy Committee*." (p. 124.)

"It is not to be merely a fact-finding body but rather one for the development and unification of *national power policy*." (p. 125.)

"As we have seen, in the far Southwest, out of a deep canyon of the Colorado River, has arisen Boulder Dam; in the Northwest human ants are building the Grand Coulee and Bonneville dams on the Columbia River; in the valley of the Tennessee the wartime Wilson Dam has been brought into fuller use and the Norris and Wheeler dams are being rushed for completion in 1936.

"Mammoth power plants, with intricate generators large enough to supply whole cities, are being erected beside the dams; land is being cleared for huge reservoirs, and thick transmission lines are being strung up to carry to home and factory the low-cost electricity that is to come. *This activity is only the beginning of a national plan to increase the supply of electric power and to bring down its cost.*" (pp. 125-6.)

"These 'yardsticks' provided by both municipal and Federal enterprises are so valuable that they alone would warrant PWA's expenditures for power undertakings. The *municipal projects have caused private utilities to adjust their rates downward in wide areas and the Federal projects have brought about rate adjustments over still larger expanses of territory.*" (p. 147.)

22. December 29, 1935.

Lilienthal, Chattanooga.

"The difficulties are great, I grant, but the stake is great—nothing less than *the electrification of America.*"

[fol. 97] EXHIBIT "D" TO BILL OF COMPLAINT**Representative Public Announcements and Releases by
Tennessee Valley Authority****I****General Scope and Nature of the TVA and Social Program****1. July 17, 1933.****TVA Press Release**

"To begin with, the area of activity is not confined to Tennessee but takes in the basin of the river of that name in its wide sweep through seven states—Virginia, North Carolina, Georgia, Alabama, Mississippi, Kentucky and Tennessee."

2. August 15, 1933.

**A. E. Morgan, Washington, D. C., Radio Address, TVA
Press Release, August 16, 1933**

"But while the provisions for producing power and fertilizer are prominent in the public attention, they are but incident in the whole plan for the Tennessee Valley Authority. That plan aims at nothing less than the displacement of haphazard and chance development by a far-reaching program of social and economic planning.

.

"With this medley of conditions, good and bad, the Tennessee Valley Authority is established in an effort to bring about an orderly and wholesome development of social and economic life. It will undertake to secure a balance between agriculture and industry by promoting the small scale endeavor to balance 'foreign' trade by developing industries peculiar to the region. Some of these will be large scale mass production projects, based on the presence of mineral resources and cheap power. Others should be in the nature of fine production, as of fine textiles, fine furniture or scientific instruments, which can be produced in small communities by intelligent craftsmanship and organization. Losses incurred in the management of local industries may be reduced by a centralized supply of technical service, such as

[fol. 98] accounting and advice on production and distribution. The encouragement of cooperatives also may reduce the waste of present methods."

3. August 25, 1933.

TVA Press Release

"The Power Policy of the Tennessee Valley Authority

"1. The business of generating and distributing electric power is a public business.

"2. Private and public interests in the business of power are of a different kind and quality and should not be confused.

"3. The interest of the public in the widest possible use of power is superior to any private interest. Where the private interest and this public interest conflict, the public interest must prevail.

"4. Where there is a conflict between public interest and private interest in power which can be reconciled without injury to the public interest, such reconciliation should be made.

"5. The right of a community to own and operate its own electric plant is undeniable. This is one of the measures which the people may properly take to protect themselves against unreasonable rates. Such a course of action may take the form of acquiring the existing plant, or setting up a competing plant, as circumstances may dictate.

"6. The fact that action by the Authority may have an adverse economic effect upon a privately-owned utility, should be a matter for the serious consideration of the Board in framing and executing its power program. But it is not the determining factor. The most important considerations are the furthering of the public interest in making power available at the lowest rate consistent with sound financial policy, and the accomplishment of the social objectives which low cost power makes possible. The Authority cannot decline to take action solely upon the ground that to do so would injure a privately-owned utility.

"7. To provide a workable and economic basis of operations, the Authority plans initially to serve certain definite

regions and to develop its program in those areas before going outside.

[fol. 99] "8. The initial areas selected by the Authority may be roughly described as:

(a) The region immediately proximate to the route of the transmission line soon to be constructed by the Authority between Muscle Shoals and the site of Norris Dam.

(b) The region in proximity to Muscle Shoals, including northern Alabama and northeastern Mississippi.

(c) The region in the proximity of Norris Dam (the new source of power to be constructed by the Authority on the Clinch River in northeast Tennessee).

"At a later stage in the development it is contemplated to include, roughly, the drainage area of the Tennessee River in Kentucky, Alabama, Georgia and North Carolina, and that part of Tennessee which lies east of the west margin of the Tennessee drainage area.

"To make the area a workable one and a fair measure of public ownership, it should include several cities of substantial size, (such as Chattanooga and Knoxville) and, ultimately, at least one city of more than a quarter million, within transmission distance, such as Birmingham, Memphis, Atlanta, or Louisville.

"While it is the Authority's present intention to develop its power program in the above-described territory before considering going outside, the Authority may go outside the area if there are substantial changes in general conditions, facts, or governmental policy, which would necessarily require a change in this policy of regional development, or if the privately-owned utilities in the area do not cooperate in the working out of the program.

"Nothing in the procedure here adopted is to be construed in any sense a commitment against extending the Authority's power operations outside the area selected, if the above conditions or the public interest require. Where special considerations exist, justifying the Authority going outside this initial area, the Authority will receive and consider applications based on such special considerations. Among such special considerations would be unreasonably high rates for service, and a failure or absence of public regulation to protect the public interest.

[fol. 100] "9. Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately-owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine effort will be made to purchase such facilities from the private utilities on an equitable basis.

"10. Accounting should show detail of costs, and permit of comparison of operations with privately-owned plants, to supply a 'yard-stick' and an incentive to both private and public managers.

"11. The accounts and records of the Authority as they pertain to power, will always be open to inspection by the public."

4. August 31, 1933.

A. E. Morgan, Knoxville, TVA Press Release

"It is a deliberate turning toward the future, a commitment to an ideal. Its success can depopulate cities, destroy a thousand entrenched privileges, invalidate a whole tradition of single-hearted self-interest.

"That sums up what this undertaking means to the President. This great project might have been located in any one of several parts of our country. It is not a pork barrel appropriation for the Tennessee region. It is part of the major program to try to find a way out of industrial chaos into a designed social and industrial order. If we do not see it that way, we do not see the heart of the Tennessee Valley program.

• • • • •

"Again I am going to quote, this time from the President when he was talking to a community up in New York State. Social and economic planning isn't a Tennessee Valley program or an Eastern problem—it is a world problem today and he sees it as such. The reason the Tennessee Valley Authority is in Tennessee is that it has to be somewhere and this is a good place. The same problem here is a National problem. The President said:

" 'We are engaged today, as you know—not just the government in Washington, but groups of citizens everywhere—in reviewing all kinds of human relationships' • • • "

[fol. 101] 5. October 20, 1933.

A. E. Morgan, Asheville

• • • By operating the Norris Dam and power plant and the Wilson Dam and power plant as a single system, a very great increase of power is possible. During the winter, when the Tennessee River is high and power is abundant at Muscle Shoals, the Norris Dam plant will be shut down and the water will be stored in the reservoir. During the summer when the Tennessee River is low and power is scarce, the Norris Dam power plant will be operated. The water used for generating power at the Norris Dam will then flow down to the Wilson Dam where it will be used again to develop more power. The two dams operated as a single system will generate about six times as much dependable power as either one alone. A transmission line is provided for in the law to connect these two plants and to regulate the supply of power between them. Materials are now being purchased and the land cleared for building that line."

• • •
6. October 31, 1933.

TVA Press Release

"The T.V.A. land planning program may be divided broadly into two parts, regional planning in its broadest sense, and town and community planning. I feel that we must proceed slowly on our regional planning and have no desire to superimpose a stereotyped pattern of perfection on the Tennessee Valley countryside. We are studying now to learn of the worthwhile developments of the Valley from the earliest times. Whatever we do, whether it be the designing of homes or the planning for use of large areas we want the essence of the scheme to be a reflection of the growth of the Valley itself and the feeling of the countryside. Hand in hand with physical planning and regional planning goes social and economic planning. We must have data on population trends, agricultural and mineral resources, age old customs and their significance and the capabilities of the people before we can determine intelligently what should be the pattern of life for the future for this vast area. • • •"

[fol. 102] 7. November 10, 1933.

Lilienthal, Atlanta. TVA Press Release November 11, 1933

"What the Tennessee Valley Authority is required to do in its power program is to set up an area for power operations. That area is to be on a comparable basis with typical private operations. To set up such a 'yardstick' the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, and with an adequately diversified industrial, commercial and residential load to provide a fair test. As business men, it is apparent to you that if the Authority is to serve only the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod."

"The people of the country must be brought to realize that there is a pool of electricity lying idle, ready and waiting to be used, and to realize what electricity can do in lightening their burdens, in increasing their incomes and making for a richer and better life."

"* * * We have and are in process of constructing a tremendous pool of power for the nation, most of which is in private ownership; a considerable percentage of which is represented by Governmental investment. A large portion of these power facilities will be idle and unused and a burden upon the investors and on the taxpayer unless we can get electricity through to the people on a broad scale. Low rates which will promote and encourage the use of electricity is an essential part of this program. * * *"

8. November 19, 1933.

A. E. Morgan. TVA Press Release

"At present, the power issue is in the Tennessee Valley Authority region. Let us hope that in the next few years, it can become so thoroughly mastered that we need give it but little thought. Our power resources here are so abundant that an adequate supply of power for all our needs [fol. 103] should be no more of a problem and a little more

of tax than abundant and pure water supply is at present. In fact, in our rural regions, an abundant supply of power should be less difficult to secure in many cases than an abundant supply of pure water. The power program of the Tennessee Valley Authority is being worked out under the direction of Mr. Lilienthal. His aim is to bring about a time when power will no longer be an important matter to demand our time and attention, when an abundant supply will be available to all at a cost so low as not to tax the family budget. * * *

9. December, 1933.

TVA Pamphlet entitled "*Tennessee Valley Authority General Information*"

"Is the Authority concerned only with power at Muscle Shoals? The Authority is concerned with the power development of the valley region as a whole. It is authorized to construct such dams in the area as it deems necessary, and to generate and distribute power from them."

10. December 4, 1933.

A. E. Morgan, New York. TVA Press Release, December 5, 1933

"The power program of the Tennessee Valley Authority is an effort in a limited area to bring about a cheap and ample supply of power on a self-supporting basis, as one of the several conditions necessary to an enlightened and wholesome economy in the region it is trying to serve."

11. December 18, 1933.

TVA Press Release

"The Tennessee Valley Authority has decided that development of the Aurora Dam on the Tennessee river should be a part of the Authority's plan for an integrated power program embracing the entire Tennessee river basin."

[fol 104] 12. January 5, 1934.

Lilienthal, Philadelphia. TVA Press Release, January 6, 1934

"The Tennessee Valley Authority bears two major relationships to business. One is that of a regulatory agency. The second is that of a stimulant to business.

.

“ * * * The Act definitely puts the Federal government into the business of rendering electric service. * * * ”

13. January 14, 1934.

TVA Press Release

“ When we carry this program into every town and city and village, and every farm throughout the country, we will have written the greatest chapter in the economic, industrial and social development of America. ”

14. January 20, 1934.

TVA—Lilienthal, Washington, D. C. Radio Address. TVA Press Release

“ * * * I want to tell you of some of the things which your Federal Government is doing in the field of electricity to make your home more convenient and more comfortable; what it is doing to lighten the labors of the millions of women who have the responsibility of guiding and caring for the home. More specifically, I shall speak of the work the Tennessee Valley Authority is doing to electrify the American Home. ”

.

“ * * * To this new agency many duties and powers were given. To it was transferred the famous Government-owned hydroelectric plant at Muscle Shoals. One of the Tennessee Valley Authority's principal duties was to extend and broaden the use of electricity in the homes and on the farms, particularly in the seven states of the Tennessee Valley. By experiments and demonstrations, the Authority was to act as a spur in hastening the time when electricity [fol 105] would be widely and generously used in making every home more comfortable and convenient. ”

“ The Tennessee Valley Authority is now employing thousands of men and spending millions of dollars in the construction of two great power dams and a 230 mile electric transmission line. * * * ”

“ It means that the average home is still barred from the almost limitless advantages of this great national resource. There is no sound reason why this condition should exist. It is part of the job of the Tennessee Valley Authority to see that this condition should not continue. ”

"There is no scarcity of a supply of electricity. The sources of electricity are abundant. We are convinced that the principal barrier to a wider use of electricity by the American housewife is the rates which are charged for electricity. We believe that, before the American home can be electrified, the rates charged in the country generally must be substantially and drastically reduced. And we believe further, that such reductions in rates will so greatly increase the sale of electricity that these reductions will be beneficial to the electric business.

"Drastically lower rates for electric service is the first step toward a wider use of electricity. The Tennessee Valley Authority is proceeding to put such substantially lower rates into effect in the area in which it is to distribute Muscle Shoals electricity.

.

"* * * This is particularly the case with the farm home. The number of farms which have electric service in the Tennessee Valley, and in the United States generally, is shockingly small. The Tennessee Valley Authority is definitely committed to an extensive program of rural electrification. The other day, on a country road in northern Alabama, I watched a crew set poles for the first farm line ever constructed by the United States government. This line will bring electric service to farmers in that area who have for years desired service and who have adequate income to justify such service. Similar lines are being constructed in about 18 counties in Mississippi and Alabama, and others are planned in Tennessee."

[fol. 106] 15. January 26, 1934.

TVA Press Release

"The Tennessee Valley Authority is also at work building hundreds of miles of rural transmission lines which will serve the rural population in a large part of these ten counties acquired in Mississippi. More than sixty miles of rural transmission line has been completed and as soon as arrangements can be made for the distribution of T.V.A. power, these communities likewise will have the benefit of electric service which has heretofore not been available, and the low rates, which is a part of the T.V.A. program."

16. February 7, 1934.

A. E. Morgan, Washington, D. C. TVA Press Release,
January 29, 1934

• • • • •
 "The Tennessee Valley Authority is the expression of a desire on the part of the President and Congress to work out in a limited area principles of social and economic planning which can later have application on a wider scale. • • •

• • • • •
 "Among the fundamental purposes to be achieved are: that haphazard and unregulated growth shall be displaced by intelligent and orderly planning; that great wastes in the present way of doing things shall be eliminated, among the greatest wastes at present being the wastes of frustrated hopes and ambitions of people who find no fair chance at life.

• • • • •
 "For instance, there is the matter of water power development. The Tennessee River system drains 40,000 square miles. It includes thousands of miles of streams, and a potential power development of several million horse power. In the past, individual power projects in this river system have been developed without relation to each other. • • • The enormous social waste of isolated developments must be eliminated. This means unified planning on a large scale."

[fol. 107] 17. February 23, 1934.

TVA Press Release

"As a means of carrying on a program of long-range planning and development, a special government agency, the Tennessee Valley Authority, was created among the first acts of the Roosevelt administration—a corporation with some powers of government and with the flexibility and initiative of a private enterprise."

18. March, 1934.

A. E. Morgan. Article entitled, "*Bench-Works in the Tennessee Valley, II A Birch Rod in the National Cupboard*," 23 Survey Graphic 105

"By the methods I have described in this article, the TVA hopes to accomplish several objectives:

"First, it hopes to unify the development of water power for the entire Tennessee River System and thus avoid the enormous waste of various independent installations.

"Second, it intends to support vigorously the position that the generation and sale of power is properly a public function, in which it is proper for the public to engage.

"Third, it hopes to establish a 'yardstick' for power, to discover what electric power ought to cost the people, and to provide a comparison between public and private ownership.

"Fourth, it hopes to encourage the wider and freer use of electricity in the American home.

"Fifth, there are dangers and disadvantages in public ownership. To evade or to deny this fact can only lead to trouble. The TVA hopes to face honestly these disadvantages and if possible to remove or to master them."

19. March 14, 1934.

TVA Press Release

"In Section 2 of the Act the following statement occurs, 'All members of the board shall be persons who profess a belief in the feasibility and wisdom of this Act.' A board believing in the feasibility and wisdom of the Act could not [fol. 105] be expected to accomplish results unless supported by a staff with similar beliefs. It thereby becomes essential that all people holding major positions with the Authority also believe in the feasibility and wisdom of the Act. The Authority, therefore, seeks men and women who are not only technically qualified by training and experience for the job at hand, but who are also social minded."

20. April 21, 1934.

Lilienthal, Chattanooga. TVA Press Release, April 22, 1934

"The TVA has under way, as you know, a comprehensive program for the development of the power resources of the

Tennessee River and its tributaries. No more ambitious program of hydroelectric development has ever been actually undertaken in this country. . . .

"As you know, we have started with the nucleus of Wilson Dam at Muscle Shoals. Within two years two more great dams will be completed—one, the Norris Dam on the headwaters of the Clinch River near Knoxville; the other, the Joe Wheeler Dam just above the Wilson Dam in Northern Alabama. Four other major dams of various types will probably be approved for early construction. A large staff is now planning the dam-building program for the next decade.

"Everything considered, the electricity produced in this vast public hydro-electric system will be as cheap as power can be produced in any part of the United States, and much cheaper than in many sections. One reason for this is the efficiency which arises from integrated control of an entire watershed under a single public ownership and administration. That ownership and control is one which is dominated by one purpose and one purpose only—service to the whole people to whom these streams belong. By the use of storage reservoirs and central control all the vast economies of large-scale production will be utilized, and the Tennessee River and its tributaries will be made to yield their great potential wealth into the hands of the people of the Tennessee Valley. The presence of coal in great quantities for standby and auxiliary steam plants will tend to keep the cost of electricity below that possible in areas having favorable hydroelectric power but in which coal is costly.

.

"I am very definitely of the opinion that it is the Authority's duty to encourage and stimulate the growth of large-scale industry in the Tennessee Valley area. We are making provision for one of the largest hydro-electric developments in the world, with a potential three million horse power available. We are expending, and expect to expend, millions upon millions of dollars in construction activities, all looking toward the development of more and more power."

21. May 21, 1934.

Lilienthal, Washington, D. C. Radio Address. TVA Press Release, May 22, 1934

"Three barriers have stood in the way of a wider enjoyment of the benefits of electricity. First, the rates for service have been too high. The second obstacle has been the price of electricity-using equipment, such as ranges, refrigerators, water heaters, and other large appliances. And the third barrier has been a lack of knowledge of the manifold benefits of the electric home, and an understanding of all the ways in which electricity could be the servant of the average household.

"The Tennessee Valley Authority is hard at work on a program to remove these three barriers to a wider use of electricity in the average home—the barrier of high rates, of high appliance costs, of inadequate knowledge of the uses of electricity."

22. June 13, 1934.

A. E. Morgan, Testimony before Sub-committee of the Committee on Appropriations, U. S. Senate

Senator Dickinson: Now, as I get it then, for the four dams alone down there, your estimates are about \$198,000,000.

Dr. Morgan: Yes; for the six dams.

Senator Dickinson: And how many of these dams are you constructing now?

Dr. Morgan: Two.

[fol. 110] Senator Dickinson: Which two?

Dr. Morgan: The Norris Dam and the Wheeler Dam.

Senator Dickinson: And what is the percentage of completion of those two dams?

Dr. Morgan: They will approach completion during the fiscal year of 1934-1935.

Senator Dickinson: Fiscal year ending June 30, 1935?

Dr. Morgan: Yes.

Senator Dickinson: They will probably be finished, then, during the calendar year of 1935?

Dr. Morgan: About that. There will be a little installation to carry over and some remainder of construction, but that is substantially so.

Senator Dickinson: Well now, in connection with these dams, the entire purpose is the production of electrical energy?

Dr. Morgan: That is the major purpose. The purpose of the Tennessee Valley Authority Act, of which these dams are a part, is to try to encourage and organize an orderly economic and social development in that region in place of the past haphazard development. With reference to the Tennessee River in particular, if we can develop the power on the Tennessee River by a unified and integrated program, we can, I think, develop power at not over half the rate that it would cost by a series of unrelated dams.

.

"I would say also that so far as the development of the water power of the Tennessee River is concerned, that a single power plant on the Tennessee River, such as Muscle Shoals, is not even economically feasible. Muscle Shoals, taken by itself, is not an economically feasible unit. If it can be united with others so that reservoir projects can supply it with water in low season, we can make it at least three times as effective per dollar invested as it is today; and the same way with Norris Dam. Taken alone it is not a good investment, but taken in connection with its effects upon the other plants downstream, it becomes a very good investment.

"If we can carry out this project as a whole we can produce electric current at not over half what it would cost at a single plant here and there."

.

[fol. 111] 23. July 1, 1934.

TVA Press Release

"Surveys are under way to determine the most feasible sites for additional dams on the Tennessee River and tributaries, Arthur E. Morgan, Chairman of the TVA, announced today."

.

" We are not proposing to build seven or eight separate power dams, operated individually for the benefit of the immediate vicinity. All dams wherever located, will

be linked by transmission lines and will thus form a single system. Regard the whole project as 'one huge dam,' if you wish to put it that way. No matter in which section of the Valley the electricity is generated, it will be available to all sections. * * *

24. October 22, 1934.

TVA Press Release

"In connection with power, I interpret that to mean that wherever power can be transmitted from generating plants along the Tennessee River or its tributaries and the distance to which that power can be effectively transmitted, therein lies the area or region within the influence of our planning activity. * * *

25. November 5, 1934.

TVA Press Release

* * * The Wilson Dam at Muscle Shoals has only a relatively small capacity for prime power, as they call it, that is, dependable power the year round, because the river varies greatly in its flow. A year ago last summer, during a dry season, there was only water enough in the river to produce 25,000 kilowatts of energy. A year or two before, in the winter time, there was water enough to produce 600,000 kilowatts of energy, a range of about twenty-five to one. On the other hand, up on one of the branch streams we are building the Norris Dam and reservoir, a reservoir larger than any now existing in the United States, big enough [fol. 112] to hold the entire flow of the river above for a year at a time. The Norris Dam, taken by itself, might not be profitable, because if you spread that flow throughout the whole year, the energy might not be worth the cost. But suppose you take the Norris Dam and the Wilson Dam at Muscle Shoals together, what do you get? For about eight or nine months in the year, there is an abundant flow in the Tennessee River, and then for two or three months there is a low flow. Now, if you use the up river power plant to store water when there is abundance below, and to let it out during the one or two or three months when there is low water below, you can bring up the flow in the lower river so that instead of having 25,000 kilowatts capacity, it will have 150,000 kilowatts capacity. You can fill up those low periods, and you can make the Wilson Dam

worth very much more than it would be worth alone. So that neither of these projects is fully valuable by itself, but taken together, they produce some of the cheapest hydro-electric power in America.

"Those are just two cases. Below Norris Dam there are places for about eight or ten power plants along the Tennessee River. There is very little storage at any of those. By building the Norris Dam up river, you can more than double the value of each of the eight or ten down river. By building additional dams up river, you can further increase the value of every one down river. Taken independently, those power plants are of doubtful merit. Taken together, they produce one of the most economical power developments on the American continent.

• • • • •

"Now, if we are going to have a case of public ownership, it must be somewhere, we must take an area. That area must be on a large enough scale to be comparable with other power developments. It can't be a little corner that is too small to be efficient. A natural unit of production is the Tennessee River watershed. Nature has made that a unit. The natural unit of consumption is an area that would use that power."

[fol. 113] 26. September 2, 1935.

Lilienthal, Detroit. TVA Press Release

"I want to emphasize that the Tennessee Valley project was not an emergency measure; it was not to be merely an unemployment relief measure."

• • • • •

"• • • • • we were directed to transform the wasted water power of the Tennessee River into electricity and to distribute that electricity at fair rates so it could be used in the humblest home and the isolated farm."

27. October 1, 1935.

Lilienthal, Fayetteville, Tennessee. TVA Press Release

"TVA has an ample source of electricity from the Tennessee River. That electricity belongs to all of us. Transmission lines are being built."

28. November, 1935.

A. E. Morgan. Article entitled, "*Bench-Marks in the Tennessee Valley*," Survey Graphic, page 529

"Two and a half years after its organization the Tennessee Valley Authority is employing 17,000 persons. Three large dams are under construction on the Tennessee River and its tributaries (two of them are nearly completed), and Congress has authorized construction of three more. In addition there are the TVA electrical and fertilizer programs. Taken altogether, the six dams and other construction work, in the number of men employed and in the amount of planning and supervision required, make up a job about three times that of Boulder Dam, and constitute one of the largest construction projects ever undertaken by the national government * * *."

[fol. 114]

II

The Intent and Purpose to Regulate Rates by the Yardstick Principle or Subsidized Competition and to Regulate Service in Accord with the Social Theories of TVA

1. June 30, 1933.

TVA Press Release

"The Authority intends to use Muscle Shoals as a 'yardstick' to determine the relative costs of public and private power operation * * *."

2. August 15, 1933.

A. E. Morgan, Washington, D. C. Radio Address. TVA Press Release, August 16, 1933

"Finally, in 1933, at President Roosevelt's suggestion, provision for the public ownership and operation of Muscle Shoals was incorporated in the Tennessee Valley Authority law. This provision may make possible the carrying out of one of President Roosevelt's policies—that of providing a publicly owned and operated power system as 'a yardstick' by which to measure the relative economy and efficiency of public and private ownership and operation."

3. September 28, 1933.

Lilienthal, Chattanooga

"The public must protect its interests in so vital a force. There are various expedients to accomplish this result. One is by commission regulation. It is pretty well recognized that regulation has not been entirely adequate to protect the public interest, and so to supplement regulation. Congress has provided for a measure of public operation on a limited scale. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity is a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interests involved, that the public, at any [fol. 115] time, may itself assume the function of providing itself with this necessity of community life.

.

"What the Authority is trying to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations. To set up such a 'yardstick' the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, with enough population density and with a sufficiently diversified industrial, commercial and residential load to provide a fair test. As business men it is apparent to you that if the Authority is only to serve the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod. The Authority will necessarily have to undertake to serve an area of concentrated industrial territory, good farms and favorable distribution possibilities. It will, therefore, be necessary to include several cities of fair size in the area. The people of Knoxville and Birmingham are soon to vote on the acquisition of their distributing systems. We are now constructing a tie line between Muscle Shoals and the new dam at Cove Creek and we propose to enter into contracts with municipalities and other agencies desiring this service in the territory between those two points.

"Obtaining this fair market in which to sell power, seems to be in sight, in view of the interest shown by about one hundred fifty municipalities. In fact, the problem of choosing between applicants will apparently be a real one."

4. October 17, 1933.

Lilienthal, Memphis. TVA Press Release

"Is it any wonder then that the people are determined to maintain the most vigilant public control of this liberating force? Various expedients for the public's protection have been adopted. One is regulation by state commissions. It is generally recognized that such regulation has not been entirely adequate to protect the public interest. And so, to supplement regulation, Congress has provided for a measure of public operation on a limited scale. This public operation [fol. 116] is to serve as a yardstick by which to measure the fairness of electric rates.

.

"What the Authority is required to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations"

5. November 7, 1933.

Lilienthal, Nashville. TVA Press Release

"Now this is what had been going on in the United States. Regulations by commissions had in many states proved ineffectual. In some states it was perfectly obvious that the regulators were not regulating the utilities, but in effect, utilities were regulating the regulators. In other words, the regulatory commissions were doing an honest and sincere job, but were hampered by the inherent, and interminable procedure of regulation.

.

"Regulation by commissions has not proved adequate. To supplement regulation by commissions, Congress passed the Tennessee Valley Authority Act. The policy written into this Act does not represent an assault upon private management

and ownership of public utilities, but it is a determined attack on private mismanagement of the public business of power. The Tennessee Valley Act is a well considered effort to prevent a recurrence of the looting of the power business at the expense of the people back home—consumers and investors alike.

.

“ . . . The small investor was assured that public regulation would protect him against watered stock and would give him a measure of security. He was assured that the public utility industry was in the hands of men who regarded themselves as, in effect, trustees of a great public business. And, when the small investor learned the real facts, his resentment was even greater than that of the consumer, who felt that his rate for service could be much lower had the electric business been operated on a proper basis. With this background, Congress passed the Tennessee [fol. 117] see Valley Authority Act which provides for a measure of public operation of the power business.

.

“This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interest involved, that the public, at any time, may itself assume the function of providing itself with this necessity of community life.”

6. November 10, 1933.

Lilienthal, Atlanta. TVA Press Release, November 11, 1933

“The national power policy of the President and the Congress written into the Tennessee Valley Authority Act recognizes that electric power, next to the soil, is our greatest resource. It recognizes that the people must maintain public control of this liberating force. This is the first objective of the national power policy to which I have referred.

.

"And so, to supplement regulation by commissions, Congress passed the Tennessee Valley Authority Act. This Act is not an assault upon private ownership and management of public utilities. But it is a determined attack on private mismanagement of the public business of power at the expense of the people back home—consumers and investors alike.

.

"It was with such a background that Congress passed the Tennessee Valley Authority Act, and set up a measure of public operation of the power business. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service. It is a reminder that unless that business is conducted by private corporations with fairness, without financial jugglery and with a due sense of responsibility to the paramount public interest, that the public at any time may itself assume the function of providing itself with this necessity of community life.

.

"We believe that definite plans of the Authority now in process of execution afford the quickest means of accomplishing a thorough revision of rate schedules and rate theories throughout the country, and with it, an increase in the use of electricity. This is an essential part, as I see it, of the new national power program inaugurated by the Tennessee Valley Authority Act."

7. November 15, 1933.

Lilienthal Announcement, Washington, D. C. TVA Press Release

"The 20-year agreement between the TVA and Tupelo is expected to set a standard for contracts with other municipalities within transmission distance of Muscle Shoals. Besides rate schedules, the Tupelo contract carries with it certain rules and regulations applicable to all TVA customers. Among other things, Tupelo agrees:

"(a) To administer its electric system as a separate department and not to mingle funds or accounts with those of any other of its operations.

“(b) To keep its electric system accounts according to a system of accounts to be prescribed by Authority after conference with Contractor, which system of accounts will so far as possible be uniform with other systems prescribed and applied in other municipalities purchasing electrical energy from Authority. Authority agrees at its own expense to render advisory accounting service in the setting up and administering of such accounts.

“(c) To furnish promptly to Authority such operating and financial statements relating to electric system operations as may be requested by Authority.

“(d) To allow the duly authorized agents of Authority to have free access to all books and records relating to electric system operations.”

.

[fol. 119] “*Development Surcharge*—Contractor agrees not to depart from the resale rates set forth in Schedule B (resale rates) without first securing the consent of Authority: Provided, however, that in order to maintain Contractor’s revenues in the developmental period in which the increased demand for power may not compensate for the greatly reduced rates provided for in Schedule B, Contractor may impose a surcharge upon those classes of consumers subject to a surcharge under the provisions of said schedule!”

8. January 5, 1934.

TVA Press Release

“The essence of this agreement is the recognition by the power companies who are parties to the arrangement that the TVA is under a duty to operate a public power business, directly and through public agencies, in order to provide a public ‘yardstick’ of the fairness of the rates charged by privately owned utilities.”

.

“There has been a growing feeling that this method (regulation by Commission) of expressing the regulatory relation of the government to the public utility business was inadequate to meet the needs of the situation. These

critics insisted that commission regulation by and large, had been ineffective; that in many states instead of the regulators regulating the utilities, the utilities were regulating the regulators; that financial abuses of the most lurid sort had taken place despite regulation; that the processes of regulation were too slow; and that the great technological savings in the field of electricity had not been passed on to the consumers.

"The power policy written into the Tennessee Valley Authority Act represents an attempt to regulate public utilities not by quasi-judicial commissions, but by competition. The Act definitely puts the Federal government into the business of rendering electric service. The Authority is required to acquire a market, to set up an area in which to conduct its operations. The results of these operations in this limited area are intended to serve as a 'yardstick' by which to measure the fairness of the rates of private utilities, and to prevent destructive financial practices by private utilities. In carrying out this competitive relation between the Federal government and the private business of electricity, the wastes of competition are to be eliminated, and the regulatory function of competition emphasized. In other words, duplication of facilities and competition in the same community is to be avoided. There is not time to discuss in detail the principles which the Authority has adopted to govern its operations in this new relation as a competitor of a public business. These principles have been set out by the Authority in its Power Policy, and have been discussed in some detail in various public statements."

9. February, 1934.

Lilienthal. Article entitled "*Lower Power Rates Mean More Appliance Sales.*" House Furnishing Review

"Now the reasons for the existing rate schedules are many. Part is due to tradition. There is a tremendous accumulation of musty legal theory and out-moded engineering practices in the field of electric rates. Part of it is due to the fact that domestic and farm electric service is monopolistic; and it is typical of monopolies that they change their practices very slowly, if at all. In many cases it is due to pressure of an outrageous capital structure, to bad management, to lack of foresight. We believe that definite

plans of the authority now in process of execution afford the quickest means of accomplishing a thorough revision of rate schedules and rate theories throughout the country, and with it, an increase in the use of electricity. This is an essential part, as I see it, of the new national power program inaugurated by the Tennessee Valley Authority Act."

10. March, 1934.

Lilienthal. Article entitled, "*Business and Government in the Tennessee Valley.*" The Annals of The American Academy of Political and Social Science (Volume 172, pp. 45-46).

"The power policy written into the Tennessee Valley Authority Act represents an attempt to regulate public [fol. 121] utilities not by quasi-judicial commissions, but by competition. The act definitely puts the Federal Government into the business of rendering electric service. The Authority is required to acquire a market and to set up an area in which to conduct its operations. The results of these operations in this limited area are intended to serve as a 'yardstick' by which to measure the fairness of the rates of private utilities, and to prevent destructive financial practices by the latter."

"In carrying out this competitive relation between the Federal Government and the private business of electricity, the wastes of competition are to be eliminated and the regulatory function of competition emphasized."

11. April 21, 1934.

Lilienthal, Chattanooga. TVA Press Release, April 22, 1934

"This perennial scrutiny of the work of public servants will certainly do more to protect the consumer against inefficiency and excessive rates than the sympathetic wrist-tapping which goes under the name of public utility regulation in so many states."

12. April 24, 1934.

Lilienthal, Boston. TVA Press Release, April 25, 1934

"In many states it had become perfectly obvious that the regulators were not regulating the utilities, but that in

effect the utilities were regulating the regulators. In other states the regulatory commissions were doing an honest and sincere job, but were rendered ineffective by the interminable procedure of regulation. And so to supplement and reinforce regulation, Congress passed the Tennessee Valley Authority Act."

• • • • •

"The first duty of the Tennessee Valley Authority in its power program is to set up what the President has called a 'yardstick' by which to measure the fairness of electric rates. It has an additional function. It is a reminder that unless that business is carried on by private corporations with a due sense of responsibility to the paramount public interest, that the public, at any time may assume the function of providing itself with this necessity of community life.

• • • • •

"So much for the first objectives of the Tennessee Valley Authority—the regulatory, public control purposes of this national power policy, we come then to the second objective of at least equal significance.

"The power program of Congress and the President has as its major objective a constantly wider use of electricity. The fundamental problem of the Tennessee Valley Authority, of the electric industry, of the Federal government, is to devise economic ways and means to make electricity generally available, of promoting the widest possible use of power in the home, on the farm and in the factory."

13. May 17, 1934.

Lilienthal, New York. TVA Release

"By 1933 the management of some of our major electric utilities had become a national scandal. It was inevitable that President Roosevelt and the Congress should squarely face this situation. It was inevitable that they should see that regulation alone was inadequate to fully protect either the consumer or the investor. It was plain to all that regulation needed strengthening and needed supplementing.

"Neither the industry nor the investors took effective action to meet this situation. The President and Congress,

in setting up the Tennessee Valley Authority, were merely responding to an overwhelming public sentiment. The public, investors and consumers alike, demanded an experiment on a broad scale, of public electric operation. This development was designed to serve as one means of seeking to prevent a continuation of financial and operating practices which had brought discredit on the entire industry, sound and unsound managements alike.

.

"The Authority is interested not merely in the expansion of its own electric sales; it is interested in increasing the consumption of electricity throughout the South, in disregard of public or private ownership."

[fol. 123] 14. May 18, 1934.

TVA Press Release

"Besides adopting a power policy and establishing rate schedules, the Authority has put into effect rules and regulations governing sale of its power"

15. June 13, 1934.

A. E. Morgan. Testimony before Sub-committee of the Committee on Appropriations, U. S. Senate

"Senator Dickinson: In other words, as I understand it now, you are setting up in a municipality, a municipal co-operative organization for the purpose of buying from you electric current and distributing it among the patrons of that locality.

Dr. Morgan: We are cooperating with an association of citizens.

Senator Dickinson: And in that cooperative organization what influence do you have on rates?

Dr. Morgan: We make a contract with them in which we prescribe the maximum rates that they may charge.

Senator Dickinson: And that is as to the consumer.

Dr. Morgan: That is as to the consumer."

16. August 1, 1934.

TVA Press Release

"Wholesale and resale rates have been fixed. . . . A transmission line to connect Wilson, Wheeler and Norris dams is under construction. One hundred miles of rural

transmission lines have been pushed out into new territory. Arrangements have been made to serve more than fifty municipalities at greatly reduced rates, and private power companies have been stimulated to substantial rate reductions in other parts of the Valley."

[fol. 124] 17. October 10, 1934.

Lilienthal. Testimony before Tennessee Railroad and Public Utilities Commission

"By Mr. Johnston:

Q. Does the Authority stand ready as a wholesaler of power to all comers to enter into an agreement with City of Knoxville for the supply of its energy without any limitation as to the resale price?

A. No.

Q. Would not?

A. Would not, and would not as to any of those other municipalities.

Q. Would not as to any of these other municipalities?

A. Without any limitations?

Q. That is selling without any agreement, that is any one would buy from a private manufacturer?

A. We believe the statute requires that we do not enter into contracts without the resale rates.

Q. Don't let me interrupt you, but I just want to get that question. Will you read the answer there, or I can repeat it off the record.

(Mr. Howard reads:) 'The present policy, we believe the statute requires we do not enter into any contracts without resale rates.'

A. Without agreement as to resale rates."

18. October 13, 1933.

I hereby certify that the attached document is a true copy of Exhibit 10-13-33a approved by the Board of Directors at a meeting held October 13, 1933.

(S.) Charles E. Hoffman, Assistant Secretary.

(Seal.)

The following are excerpts from the foregoing document.

"We know the existing demand is being adequately supplied by the privately owned utilities. There are only two

ways whereby the Authority can dispose of this additional block of power: (1) Sale in bulk to the private utilities. [fol. 125] Since these utilities have now adequate supplies, this alternative implies the creation of additional demand consequent upon either a substantial industrial development, or substantial increases in domestic and farm use, rendering existing privately-owned facilities inadequate. Distribution would continue to be through the facilities of existing companies. Rates to the ultimate consumer of power purchased from the Authority would be regulated by the Authority, under the terms of the contract of purchase. (2) By sale of such power to municipalities or to the public agencies which are now being served by private utilities. The Authority might dispose of its power by taking part of the field now occupied and served by the existing utilities. A typical case is sale at wholesale to a municipality which owns its own distribution system, now purchasing at wholesale from a private utility. Since there are few municipalities in the area which own their distribution systems, such a method of disposing of the Authority's power would involve the acquisition by such municipalities of distribution facilities now owned by the utilities, or the construction of competing facilities."

.

"C. The President's policy: The "Yardstick."

President Roosevelt has uttered publicly that one of the functions of operation of Muscle Shoals is as a "yardstick" by which to measure the reasonableness of electric rate charges. In view of his sponsorship of this legislation, the yardstick idea must be taken to be definitely a part of the policy embodied in the Tennessee Valley Authority Act.

.

4. For the Authority's operations to provide a "yardstick" of public operation by which to measure private operation, it is essential that the Authority engage not only in the generation, but participate in the transmission and distribution of electricity, since these latter two phases of electric service represent the most important part of the cost of such service. A public yardstick, to have value,

necessarily means public operation from power house to consumer's premises. (It is for this reason that the Authority has adopted a policy of rate and accounting control of municipal distribution operations.)"

[fol. 126]

III

Intent to Oust Existing Utilities and Monopolize the Electric Utility Business in the Tennessee Valley Area

1. October 17, 1933.

Lilienthal, Memphis

"I suppose it is obvious that all computations concerning costs are based on the expectation that the Authority will sell the power which it has available. Muscle Shoals was turned over to us as a going plant, but not as a going concern with customers. Obviously, if we sell only one kilowatt hour, our cost will be hundreds of thousands of dollars a kilowatt hour, rather than a few mills. If the power is not utilized in volume, no one will receive the great potential benefits of the wealth of the Tennessee River. It is axiomatic in the electric business that an increase in use decreases the cost per unit of output. Accordingly, we look forward to a maximum use of our facilities, because it is in that way that the Authority and those agencies which buy its power at wholesale can steadily bring down rates to the householder, the farmer and the business man, and bring to this area the economic and social benefits of the President's plan."

.

"The Authority must carry out the national policy entrusted to it. It must acquire a market for its power."

2. November 10, 1933.

Lilienthal, Atlanta. TVA Press Release, November 11, 1933

"Within the area of the Tennessee Valley, for example, privately owned electric companies have generating and transmission facilities which can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. A fair esti-

mate is that 25% of the investment in power houses and transmission lines is idle, and is piling up fixed charges, because the customers of these companies are still tied to a low average use of electricity. The Tennessee Valley [fol. 127] Authority has a hydro-electric plant at Muscle Shoals with a rated installed capacity of 250,000 H.P. But that is only the beginning of the story. The Authority is constructing a dam and power house at Cove Creek, and another dam and power house above Muscle Shoals at what is known as the 'Joe Wheeler' dam, which together will increase the capacity of Wilson Dam to at least 600,000 H.P.

.

"If we admit that the use of electricity cannot be increased many fold; if that is our mental attitude, then we must be logical and immediately stop construction of the Cove Creek dam and of the Joe Wheeler dam."

3. November 20, 1933.

A. E. Morgan, Boston. TVA Press Release, November 21, 1933

"* * * the economy of electric power in the Tennessee Valley area will depend much on large scale developments that are designed and operated as single integrated systems. The entire Tennessee River System, with its thousands of miles of streams, should be under one control and ownership, which means government ownership."

4. January 5, 1934.

TVA Press Release

"Had the power companies which are parties to this contract been unwilling to sell these facilities at a fair price, or had they insisted on payment for intangibles or water, the Authority would have been under a definite mandate to construct duplicating facilities rather than submit to being 'held up.'"

5. January, 1934.

A. E. Morgan. Magazine Article, "*Bench-Marks in the Tennessee Valley*," 23 Survey Graphic 5

"Without suggesting any particular level of n't cost, I venture the opinion that if the water-power development

of the entire Tennessee River drainage area of 40,000 [fol. 128] square miles can be given a single unified ownership and control, the unit cost of power may be no more than half of what it would be with divided ownership and management. To illustrate: Near the east boundary of Tennessee is a damsite which will provide vast storage capacity for an area of very heavy rainfall and run-off of a few thousand square miles. From this point down the Tennessee River to its mouth is a fall of, roughly, one thousand feet, nearly all of which can be used for generating power.

.

"Now consider what would be accomplished by a single unified system, thoroughly interconnected by transmission lines and controlled from a single office. During wet seasons or wet years the storage dams would be closed until their reservoirs were filled, and all power would be developed from plants having no storage, or inadequate storage. If rains should be heavier on one tributary than on another, the full reservoirs would be drawn upon. On some of the smaller tributaries of the Tennessee, sometimes at high elevations, there are reservoir sites of very large capacity, but without water enough to fill them. Those cheapest and most capacious sites could be developed by building dams, and then, for off-peak hours at night, for a few wet months during the year, and for intermittent wet seasons, all surplus power could be used in pumping water uphill into those high reservoirs which would have power plants to be used during peak loads or for a standby supply. . . .

"With such a single integrated system under a single control, the full hydro-electric power possibilities of the region could be realized, and the cost per unit of private power might be not more than a half or even a third of the cost of separately owned and operated plants. . . .

"Such unified control and operation implies government ownership and operation. The control of this great electric-power system by a private corporation would give economic power over the people of the region which no self-appointed private business men ought to hold. Such management and operation would of necessity be governmental and public in its nature. . . ."

[fol. 129] 6. January, 1934.

A. E. Morgan. Magazine Article, "*The Tennessee Valley Authority*," Scientific Monthly p. 64 (Address to the National Academy of Sciences, Massachusetts Institute of Technology, Cambridge, November 20, 1933)

"Lastly, the economy of electric power in the Tennessee Valley area will depend much on large-scale developments that are designed and operated as single integrated systems. The entire Tennessee River system, with its thousands of miles of streams, should be under one control and ownership, which means government ownership.

.

"* * * the value of that private plant will be doubled by the building of Norris Dam at public expense. Only by a single organized system of water power plants for the whole Tennessee River system can the full economy be realized. With that organization, water power may cost less than half what it would if the various units should be developed independently by private companies. Water power is to have stiff competition from steam and Diesel engines. If the Tennessee River region is to realize its possibilities in water power it can not afford to throw away this economy."

7. January, 1934.

Lilienthal. Magazine Article, "*Electrification of America*." In House Furnishing Review, p. 52

"Looking at the country as a whole, without respect to public operation or private operation, it is perfectly evident that we now have and soon will have a tremendous surplus supply of electricity. Within the area of the Tennessee Valley, for example, privately owned electric companies have generating and transmission facilities which can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. A fair estimate is that 25% of the investment in power houses and transmission lines is idle, and is piling up fixed charges, because the customers of these companies are still tied to a low average use of elec-

tricity. The Tennessee Valley Authority has a hydroelectric plant at Muscle Shoals with a rated installed capacity of 250,000 H. P. But that is only the beginning of the story. The Authority is constructing a dam and power house at Cove Creek, and another dam and power house above Muscle Shoals at what is known as the 'Joe Wheeler' dam, which together will increase the capacity of Wilson Dam to at least 600,000 H. P. * * *

8. March, 1934.

A. E. Morgan. Magazine Article, "*Purposes and Methods of the Tennessee Valley Authority*" appearing in *The Annals of The American Academy of Political and Social Science* (Vol. 172, p. 57)

"There is one other element that I want to mention in the matter of electric power. It is economy of generation. We are taking the position that the whole Tennessee River system ought to be a single unit in the planning and distribution of electric power. Some of the plants have abundant power only a part of the year; other plants can have storage so that all the power can be used all the year or in any part of the year. If we can use those plants at the time they have power and tie them all together as a unit, I believe we can get at least twice, possibly three times, as much value for a dollar's expenditure as we can if those plants are owned individually. I believe it is not possible to organize them under private ownership, unless we should have some great super-corporation dictating the economic conditions of life over an area three-quarters the size of England. We believe that public ownership is the only right way to integrate that system, and we are working on that program.

"And so, as we go along, we are trying to take one after another of the economic problems that arise in that region, to work from chaos into order. We are trying not to do it in an arbitrary way of taking the property because we want it, but are trying to find ways in which a transition can be made from the present regime to another regime in which there will be ownership at home, if possible, with elimination of excessive charges and of duplication and friction, in which the essence of economic planning can be achieved in an orderly and systematic and patient manner."

[fol. 131] 9. April 22, 1934.

Lilienthal, Boston. TVA Press Release, April 25, 1934

"The Authority must carry out the national policy entrusted to it. It must acquire a market for its power. It must work toward a wider use of electricity. None of these objectives will result in the predicted calamities to the industry and its bona fide investors. The Authority early adopted a policy of buying, at fair prices, the property of private utilities in the area selected for its 'yardstick' operations rather than to duplicate facilities and engage in destructive competition."

10. May 17, 1934.

Lilienthal, New York. TVA Press Release

"The Authority is under duty to acquire a market for its power. It is authorized to compete with existing utilities, and for this purpose is expressly empowered to erect duplicate facilities."

11. May 21, 1934.

Morgan. Testimony at House of Representatives Hearings, pp. 155, 156, 162, 163

"Mr. Bacon: On the question of the market for power, do you intend to take power into the big cities, like Birmingham and the other industrial centers of that region?"

"Dr. Morgan: In purchasing from the Commonwealth & Southern Co., we made an agreement with them that we would not invade their territory for the present, until the Norris Dam is completed. After that, we hope we can make some arrangement for a division of territory."

"Mr. Thurston: Will you build dams first, or will you make the division before you build the dams?"

"Dr. Morgan: We are building the dams."

.

"Dr. Morgan: . . . This project is an effort to set up a governmental development of power, and, if that is adopted, it seems to me a reasonable set-up that it should not be hamstrung and so limited that it is bound to fail. [fol. 132] We are trying to set up a unit that will be comparable to a well-managed private unit. It re-

quires an adequate area. . . . I hope we can help to establish a policy for the power industry."

"As I said this morning, if this project is to work at all, it must have some area to work in. We must in some way acquire an area to work in, either by setting up competing facilities to the present facilities, or by purchasing the facilities of present utilities."

"In our opinion, if we can carry through the program we have, we may cause a temporary disadvantage to the immediate power interests around there—to the companies immediately surrounding us. We are trying to make arrangements with them to purchase their utilities. This project is an effort to set up a governmental development of power, and, if that is adopted, it seems to me a reasonable set-up that it should not be hamstrung and so limited that it is bound to fail. . . .

"We are trying to take them over. We were in negotiation with the Commonwealth & Southern, and we have come to an agreement; as the other plants come into operation, we ought to take over more.

"Mr. Bacon: In purchasing these transmission lines, you have come to an agreement with the companies, but it is really an agreement under duress, is it not, because if they did not sell to you, you would duplicate their lines?

"Dr. Morgan: Yes."

"Mr. Bacon: So they were compelled to sell?

"Dr. Morgan: Yes—they were not obliged to; they could take the other course.

"Mr. Bacon: I understand.

"Dr. Morgan: Here we have a project as a whole. This project is for a yardstick for power, taking the set-up here. If there is no place to sell that power it is not a project, but only an idea. We have to see this as a whole, or else we cannot achieve it at all.

[fol. 133] "Mr. Bacon: I understand the necessity for taking over their transmission lines, but they were forced

to sell to you because if they did not sell to you, you would put power lines in and put them out of business.

"Dr. Morgan: We are not going to sell power unless we sell it somewhere.

"Mr. Bacon: Naturally, they will make the best deal with you that they can, of course.

"Dr. Morgan: I hope they will deal with us. We are carrying on some negotiations where the course is not so smooth.

"Mr. Bacon: If you hold a man up with a pistol, if he can get off with half of his possessions, he is going to do it."

12. June 1, 1934.

TVA Press Release

"The Authority is under duty to acquire a market for its power. . . . It is authorized to compete with existing utilities, and for this purpose, expressly empowered to erect duplicate facilities."

13. July 6, 1934.

TVA Press Release

" 'There are only two alternatives open to the people of North Alabama,' Mr. Lilienthal said. 'The first is to build duplicate and competing plants with the delay involved in getting construction under way and with the expense of acquiring enough customers to insure financial success.

" 'We believe that the communities would get 100 per cent of the business because of the lower rates and because of the loyalty of the people of these communities.

" 'The results of this alternative clearly, would be to render valueless the lines, poles, transformers, etc., which are now owned by the Alabama Power Company. This property is useful and has a value at the present time to the people of the community.' "

[fol. 134] 14. January 13, 1935.

A. E. Morgan, Swarthmore College. TVA Press Release, January 14, 1935

"Private initiative and rugged individualism showed no sense of social responsibility, no evidence of planning. If we can develop the Tennessee Valley as a unified system

we can do it at half the cost of private management. Public control is essential to prevent a great social and economic waste."

15. March, 1935.

Morgan. Magazine Article, "*Selfish Interests Must Go*" in The Forum, p. 131

"The program is under way. Whether it indicates that government ownership and operation are superior to private or vice versa, I believe events should determine. I believe that criticism of that program ought always to be free. I think, however, that criticism ought to be fair; and wherever there is an effort to misrepresent, to cloud the issue, to mislead the public and so to discredit such an undertaking because certain investors might suffer—there I think we have one of the evidences of how hard it is to establish anything new in our lives. Dividends have been paid through the years on securities which represent no outlay of money, and yet there is resentment at the suggestion that these imaginary values should be written off. This is an illustration of the difficulty of instituting the New Deal.

• • • • •

"Wherever we turn we find that things as they are have become the basis of some personal interest. All the disabilities of our economic system have been taken advantage of in some way. For instance, go to a small town and you will commonly find five times as many merchants as are necessary. Four out of five are economic parasites. If that town could reorganize itself and have one fifth as many merchants and have the other four fifths of its leading citizens doing other services—taking care of the public health of the community, establishing dental and medical clinics, giving vocational guidance to the young people—we would have a better town. If the town can support five times as many people serving the public as are necessary [fol. 135] to run its stores, why not support people performing necessary services rather than people who are duplicating services which are already being performed? And yet, whenever any organization has made an effort

to eliminate a superfluity of personnel in any field, there is at once the cry that it is interfering with private interests.

.

"As a small boy, I heard a story about how the East Indians catch monkeys. According to the story, they take a coconut and cut a hole in it barely big enough for the monkey's empty hand to pass through. In it they place some lumps of sugar and then fasten the coconut to a tree. The monkey squeezes his hand inside the coconut and grasps the sugar and then tries to draw out his fist. But the hole is not large enough for his closed fist to go through, and greed is his undoing, for he will never give up the prize.

"American business to some degree is in the same situation. It is not yet willing to give up the sugar. Only so far as it becomes willing to relinquish this grasp can the New Deal survive and be a reality."

IV

The Intent and Purpose to Promote Public Ownership of Local Electric Utilities

1. October 17, 1933.

Lilienthal, Memphis. TVA Press Release

"To you who are investors in public utility securities, I want to speak very frankly: After long deliberation, a national policy has been determined upon whereby a limited example of public operation of the power business is to be set up and to be given a chance to show what it can do. This is now the nation's policy."

2. November 7, 1933.

Lilienthal, Nashville. TVA Press Release

"In order to fully understand the reasons for the power program set out in the Tennessee Valley Authority Act, it [fol. 136] is necessary to recall what has been happening in the United States during the past ten years. It is necessary to understand that the people back home have become thoroughly aroused and that they are determined that the disgrace which was cast upon the electric industry during

the past decade, and the losses which have been visited upon investors in public industries is not to be repeated.

"You are all thoroughly familiar with the sordid story. I need not recall to your minds the quarter of a million dollars which Samuel Insull paid to the Chairman of the Illinois Public Utilities Commission. Those of you who are investors in public utility securities are familiar with the story of gross inflation, of the pyramiding of stocks, of write-ups, of bonuses, of the purchase of isolated utility plants at outrageous and unreasonably high figures and the issuance of securities on the basis of such prices. Instances of these practices can be cited to you almost from coast to coast.

"I have no desire to intimate that every important executive in the public utility business followed such practices, but there can be no question that in the last decade the dominate power was in the hands of financial pirates and free-booters."

3. January 5, 1934.

TVA Press Release

"The essence of this agreement is a recognition by the power companies who were parties to the arrangement that the TVA is under a duty to operate a public power business, directly and through public agencies."

4. January, 1934.

A. E. Morgan. "*The Tennessee Valley Authority*" Published in Scientific Monthly p. 64 (Address to the National Academy of Sciences, Massachusetts Institute of Technology, Cambridge, November 20, 1933)

"Another object of the Tennessee Valley Authority is to make this region and the country as a whole more fully aware of the vast possibilities of electric power for enlarging the freedom and scope of modern life in the home and on the farm. This can only come with cheap power, from [fol. 137] which all speculation and exploitation have been removed. The electric power business is one of the simpler industries of our country. It does not compare in complexity with the shoe industry, the automobile industry or the railroad industry. No vast tribute should be paid for management and financing. Brought down to its simpler

necessities, electric power should be a universal convenience, supplied as city water supplies usually are, on a basis of service and not of commercial exploitation."

5. January, 1934.

A. E. Morgan. "*Bench-Marks in the Tennessee Valley*,"
Published in 23 Survey Graphic 5

"Just as an adverse balance of foreign trade tends to bankrupt a nation, so the constant drain from a municipality of payments to a foreign-owned utility tends to economic impoverishment. Given administration of equal quality, the ideal status of a city utility is that it is fully amortized and is owned by the public it serves. Regional independence from a perpetual drain is no less important for an area as large as that of the TVA than for a city."

6. March, 1934.

A. E. Morgan. "*Purposes and Methods of the Tennessee Valley Authority*" Published in The Annals of The American Academy of Political and Social Science, (Vol. 172 pp. 53, 54)

"Outside Ownership of Utilities

"And let me divert right here to the matter of electric power. The utilities of that region are not largely owned locally. There is some preferred stock scattered around the country, mostly, it would appear, to widows and orphans. While the Tennessee Valley Authority law was in Congress, a large number of letters were received at the Capitol protesting against the passage of the law. They largely came from holders of the preferred stock and I think two thirds of them came from widows and orphans. I have a collection of possibly a hundred of those letters. I have wondered what economic accident it is that causes [fol. 138] such a backlog of widows and orphans for the utilities to appeal to for public support.

"Possibly 10 or 20 per cent of the ownership of the local utilities is in that region. The rest is outside; the control is outside, the dividends largely go outside to our large centers. The region exports money. A country that does too much of that is going to be in trouble."

" . . . We are taking the position that unless there is some necessary element of service rendered, foreign ownership is destructive to a community and its elimination is a sound element in social and economic planning."

7. March, 1934.

A. E. Morgan. "*Bench-Marks in the Tennessee Valley, II A Birch Rod in the National Cupboard*," Published in 23 Survey Graphic 105, 110

"For the government to have a genuine 'yardstick' for power it must generate and sell power on such a scale that the operation can be representative of efficient management. Fortunately for this program, the drainage area of the Tennessee River, with certain limited areas and cities in addition, constitutes such a unit. At present it is almost an independent area, and can be treated as a unit with very little adjustment of physical facilities. The TVA, therefore, plans through a period of years to treat this region as a unit of power supply, and to attempt to demonstrate what is the normal and reasonable cost of electric power. Its general plan is to generate and transmit power to the individual communities, encouraging them to own and operate their own municipal or community distributing systems. The TVA will furnish engineering and accounting advice and supervision. In this way the communities can have the advantage of large-scale low-cost generation and transmission and also the advantage of local public ownership. For such a program, a fairly large area of operation is necessary."

[fol. 139] 8. April 21, 1934.

Lilienthal, Chattanooga. TVA Press Release, April 22, 1934

"Perhaps the most important factor in insuring a low cost for hydro-electric power in this region is the fact that the distribution of this power to the factories and homes and farms, for the most part, will be in the hands of public agencies. Industries seeking to use large blocks of hydro-electric power in the Tennessee Valley will not be forced to support dizzy towers of inflated capitalization. They will not have to pay for the financial misdeeds of the builders of utility pyramids. Under public distribution of power with centralized accounting, control and supervision in the

hands of a regional authority, there will be the greatest incentive to economy and managerial efficiency. Each community will try to make its record better than that of its neighboring community."

9. April 24, 1934.

Lilienthal, Boston. TVA Press Release, April 25, 1934

"Now this is what had been going on throughout the United States—financial excesses, political corruption, an enforced frugality in the use of a great natural resource."—

.

"Twenty million American homes are to be denied the full benefits of a great national resource in order that inflated stock may pay out."

10. June 13, 1934.

A. E. Morgan. Testimony before Sub-committee of the Committee on Appropriations, U. S. Senate

"Senator Dickinson: And, if it takes \$300,000,000 to put in or make this experiment on behalf of the citizens involved here, might I inquire if you would state what you would think it would take from the public treasury and the taxpayers of the United States to help the people in the rest of the United States under a similar program?"

Dr. Morgan: Most of that \$300,000,000 is for power development, and will be gradually repaid out of revenues. [fol. 140] I think it will cost the taxpayers of America altogether less than it is now costing in the rest of the United States. For instance, in Knoxville, the people now are paying a certain rate for electric power. We believe that we can cut that rate decidedly and yet that the people can pay for their entire installation in 10 years out of the rest. That is, the rates they are paying now are so excessive, the taxes they are paying, in the form of electric rates now are so excessive that we can cut that 30 percent and yet out of the rest of it that they can pay the whole thing back in 10 years.

Senator Dickinson: It seems to me that is a tremendous indictment of all of the authorities that have had anything

to do with the supervision of electric rates in any of the localities or States where you happen to be distributing power.

Dr. Morgan: I am not commenting on that statement."

11. June 22, 1934.

Lilienthal, Jackson. TVA Press Release

"I am not an alarmist, but I want to warn you that powerful forces are at work to deprive the South of the greatest opportunity which ever came to any people. A year ago the disciples of greed and blindness that brought this country to the verge of a collapse had hurried into the storm cellars, whimpering and crying for help. . . .

"The people of the country must choose whether to follow the leadership of the President or the leadership of the selfish and blind that brought us so close to destruction.

"The first great test is in your hands here in the Tennessee Valley. Under the cover of various disguises, powerful forces are at work to destroy the long-time objectives of the Tennessee Valley Authority. In order to fill their own pockets, these powerful groups are ready at any cost to destroy the Tennessee Valley Authority's program and to keep the President's objectives from being fulfilled."

[fol. 141]

V

The Use of EHFA to Promote the Business of TVA as a Public Utility

1. December 20, 1933.

TVA Press Release

"David E. Lilienthal, Director of the Tennessee Valley Authority in charge of its power program, tonight issued the following statement in explanation of the purposes of the Electric Home and Farm Authority, Inc., just created by Executive Order of President Roosevelt.

"The objective of this program is a wider and greatly increased use of electricity in the homes and on the farms in the seven states of the Tennessee Valley. In order to carry out the program there must be a broadscale distribution of very low cost standard quality electric using ap-

pliances and concurrently a revision downward of electric rates. . . .

"It is proposed that the federal government participate in this program in the following ways:

"1. By assisting in financing the consumer in purchasing standard electric equipment at very low prices.

"2. By securing reductions in electric rates by agreement with the utilities publicly and privately owned so as to make use of this equipment feasible for the average householder and farmer.

"3. By engaging in educational work and research to further lower the cost of electric equipment and to make it better adapted to the needs of the average home and farm.

"Electric appliances are now sold by regular dealers for the manufacturers, by hardware and department stores, and by electric utilities. The program does not contemplate a disruption of these outlets. Each dealer will, of course, continue to exhibit and sell any lines of electric appliances he desires but he will also have an opportunity to sell the low-priced appliances which this program is expected to create. The program will stimulate the dealer's general business."

[fol. 142] 2. January 5, 1934.

Lilienthal, Philadelphia. TVA Press Release, January 6, 1934

"In common with other recently created agencies of government, the Tennessee Valley Authority has a definite duty and a definite role to play in this new function of government as a stimulating and coordinating force. There are a number of illustrations in the work of the Tennessee Valley Authority of this need of government stimulation. The most recent, and perhaps the best illustration, is afforded by the creation a few days ago, by order of President Roosevelt, of a subsidiary of the Tennessee Valley Authority, a Delaware corporation known as Electric Home and Farm Authority. The occasion for the creation of this agency and a brief analysis of its functions will show how the government can act as a stimulator and coordinator in its relation to business."

3. January 20, 1934.

TVA Press Release

" . . . On December 19, President Roosevelt issued an Executive Order creating an agency through which the Tennessee Valley Authority will carry this appliance program forward. It is called: Electric Home and Farm Authority, and its articles of incorporation were filed today. At present the corporation has funds to operate only in the seven Tennessee Valley States."

4. March 28, 1934.

TVA Press Release

"Mr. Lilienthal also announced that the financial set-up of the EHFA has been completed and that the million dollar capital from the NRA has been made available. In addition to this, the EHFA has access to a credit of ten million dollars from the RFC."

5. April 5, 1934.

TVA Press Release

"The Electric Home and Farm Authority is a special agency created by executive order of the President to carry [fol. 143] out an appliance program for TVA. Its central offices are to be established at Chattanooga."

6. April 6, 1934.

TVA Press Release

"First sale and demonstration of electric appliances manufactured for the Electric Home and Farm Authority will be held at Tupelo, Miss., early in May. All appliances will carry a distinguishing mark of the Authority."

7. April 16, 1934.

TVA Press Release

"The presence of this [TVA] emblem on a appliance means that the appliance has been built to EHFA specifications as to quality and design, and that the retail price fixed by the manufacturer is one which EHFA considers reasonably low.

.

"TVA emblem-bearing appliances cannot be sold or financed under the EHFA plan in a community until the local electric utility in such community has entered into a special agreement with EHFA."

8. April 17, 1934.

TVA Press Release

" * * * It [the TVA emblem] can be used only on appliances manufactured to EHFA quality and price specifications, and only on these appliances when they are sold in areas served at TVA rates or at rates which the Authority considers low enough to make use of this equipment feasible to families of low or moderate income."

9. May 24, 1934.

EHFA Press Release

" * * * Distribution of EHFA-approved appliances will be extended to other areas where rates for electricity are sufficiently reduced by private power companies to permit popular use of such conveniences."

[fol. 144] 10. August 23, 1934.

EHFA Press Release

"EHFA came into being primarily because the high cost of electric power and the high cost of household appliances have been a double barrier to the full use of electricity in homes and on farms. EHFA set out to remove this barrier by encouraging the reduction of rates and prices."

11. June 26, 1933.

The following quotation appears in the minutes of a meeting of the Board of Directors of the Tennessee Valley Authority held June 26, 1933:

"The Board adopted the following policy:

"That no employee of the Tennessee Valley Authority make statements respecting matters of future policies or activities of the Corporation before such policies or activities have been brought before the Board and action taken thereon."

I hereby certify that the foregoing is a true copy of a quotation which appears in the minutes of the above described meeting.

Charles E. Hoffman, Assistant Secretary.

12. August 5, 1933.

The following appears in the minutes of the Tennessee Valley Authority of August 5, 1933, with reference to publicity:

"It was decided that all publicity shall issue through the Publicity Department and that special publicity dealing with particular phases of the work shall have the approval of the Director concerned before it is released."

I certify that the above is a true and correct copy of that portion of the minutes of the Tennessee Valley Authority of August 5, 1933, with reference to publicity.

Tennessee Valley Authority, John L. Neely, Jr.,
Secretary.

[fol. 145] EXHIBIT "E" TO BILL OF COMPLAINT

Typical State Statutes Sponsored by Defendants

Tennessee Public Acts, 1935

Chapter 32

Senate Bill No. 113

(By Moss, Carter, Maxwell, Boyd, Harris, Sprouse, Chambers, Cate, Davies, Bramley, Todd, Draper, Mosby, Elkins, Lowe, Fowler, Abernathy, Atchley, Dodson, Trotter, Howell, Ewell, Ashley, Carden, Hale, Wright, Jones.)

An Act to authorize counties, incorporated cities and towns in the State of Tennessee to construct, purchase or otherwise acquire, and to operate and maintain electric generating or distributing systems, within or without the county or corporate limits, to construct, purchase or otherwise acquire, to operate, maintain or use, individually or jointly, a transmission line or lines, within or without the corporate or county limits, to make improvements, exten-

sions, betterments or additions to such electric systems, and such transmission line or lines to furnish electric power and energy to any consumer or consumers, to finance such acquisition, improvement, extension, betterment, or addition by the issuance of bonds and the acceptance of Federal grants, to provide for the supervision, management and control of such electric systems and such lines, to prescribe rules and policies to govern resale rates, disposition of revenue, and other operating and management practices of such systems, in order to promote the increased domestic use of electricity in rural and urban areas by enabling such counties, incorporated cities and towns to utilize the surplus power generated by the Tennessee Valley Authority, or the power generated at any other works or dams.

[fol. 146]

Chapter 37

Senate Bill No. 122

(Moss, Carter, Maxwell, Boyd, Harris, Sprouse, Evins, Loveless, Hale, Todd, Chambers, Bramley, Cate, Davies, Wright, Draper, Lowe, Dodson, Abernathy, Atchley, Trotter, Howell, Ewell, Ashley, Garden, Fowler.)

An Act to authorize municipal corporations, counties, towns and cities owning and/or operating or authorized to acquire and/or operate, electric generation, transmission and/or distribution systems, in contracts with certain governmental agencies for the acquisition of such systems or for the purchase of electric power and energy to stipulate and agree to certain covenants, terms and conditions; and to validate any such covenants, terms and conditions heretofore stipulated or agreed to.

Senate Bill No. 124

(Moss, Carter, Maxwell, Boyd, Harris, Sprouse, Evins, Cate, Wright, Bramley, Draper, Fowler, Lowe, Abernathy, Atchley, Dodson, Hale, Trotter, Ewell, Howell, Ashley, Garden.)

An Act to Define and Limit the Authority, Powers and Jurisdiction of the Railroad and Public Utilities Commission So as to Exempt Therefrom Certain Federal and State Corporations, Agencies, Instrumentalities, and Other Public Bodies and Certain Non-profit Organizations Herein Defined as Non-Utilities; to Authorize Utilities to Sell, Lease

or otherwise Dispose of Their Property to Non-Utilities; and as a Part Hereof to Amend Sections 5380 to 5508, Inclusive, of the Official Code of Tennessee, Passed at the Regular Session of the General Assembly of the State of Tennessee in 1931, Known as the Code of Tennessee of 1932, Said Section of the Code Defining the Term "Public Utility."

[fol. 147]

Senate Bill No. 121

(By Moss, Carter, Maxwell, Boyd, Harris, Sprouse, Loveless, Todd, Chambers, Cate, Wright, Bramley, Draper, Lowe, Abernathy, Atchley, Dodson, Hale, Trotter, Howell, Ewell, Ashley, Carden, Fowler.)

A Bill to Be Entitled: "An Act to Amend Chapter 23, of the Code of Tennessee, Being a Chapter Creating Railroad and Public Utilities Commission, and All Acts Amendatory Thereof, so as to Provide for an Appeal From or Review of, Orders, Judgments, Decrees and Regulations of Said Commission."

Public Acts of the Extra Session

Chapter 29

Senate Bill No. 7

Elkins
Mosby
Abernathy
Fowler

Harris
Sprouse
Howell
Atchley

An Act Validating, Ratifying, Approving and Confirming All Agreements Heretofore Entered Into Between Incorporated Cities or Towns, Counties and/or Special Taxing Districts of This State and the United States of America for the Making of Any Loan and/or Grant Under Title II of the National Industrial Recovery Act, and All Proceedings Taken in Performance, in Whole or in Part, of Any Such Agreements, Including the Authorization of Any Bonds, Notes, Warrants and Other Instruments, Obligations and/or Evidences of Indebtedness, and Authorizing Completion of All Such Proceedings, Including the Issuance, Sale and Delivery of Such Bonds.

[fol. 148]

Chapter 30

Senate Bill Number 8

Elkins
Mosby
Abernathy
Fowler

Harris
Sprouse
Howell
Atchley

An Act Simplifying and Clarifying the Procedure for the Construction and Financing of Public Works Projects by Municipalities, Enabling Municipalities to Make and Perform Contracts With Federal Agencies Relating to the Construction and Financing of Such Projects and Conferring Additional Powers Upon Municipalities.

Chapter 31

Senate Bill No. 9

Elkins
Abernathy
Harris
Howell

Mosby
Fowler
Sprouse
Atchley

An Act Validating, Ratifying, Approving and Confirming All Bonds, Notes, Warrants and Other Instruments, Obligations and/or Evidences of Indebtedness Heretofore Issued and Sold by any Incorporated City or Town, County or Special Taxing District of This State to the United States of America or any Agency or Instrumentality Thereof.

Chapter 33

Senate Bill No. 18

Fowler

Boyd

Carden

An Act Providing for the Acquisition, Purchase, Construction, Reconstruction, Improvement, Betterment, Extension, Operation and Maintenance of Revenue-Producing Public Works by Any Incorporated City or Town; Authorizing and Regulating the Issuance of Revenue Bonds for Financing Such Public Works; and Providing for the Payment of Such Bonds and the Rights of Holders Thereof.

[fol. 149] IN CHANCERY COURT OF KNOX COUNTY, TENNESSEE
ORDER FOR REMOVAL—June 15, 1936.

The defendants, Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal, having within the time provided by law, filed their petition for removal of this cause to the District Court of the United States for the Eastern District of Tennessee, Northern Division, and having at the same time offered their bond in the sum of Five Hundred Dollars (\$500.00) pursuant to statute; now, therefore, this court does hereby accept and approve said bond and grant said petition and does order that this cause be removed for trial to the next District Court of the United States for the Eastern District of Tennessee, Northern Division, and that all proceedings in this Court be stayed.

This 15 day of June, 1936.

A. E. Mitchell, Chancellor.

Clerk's certificate to foregoing papers omitted in printing.

[fol. 150] IN UNITED STATES DISTRICT COURT, EASTERN
DISTRICT OF TENNESSEE, NORTHERN DIVISION

In Equity. No. 228

THE TENNESSEE ELECTRIC POWER COMPANY, a Maryland Corporation, et al., Complainants,

v.

TENNESSEE VALLEY AUTHORITY, a Body Corporate Created by an Act of Congress Approved May 18, 1933, et al., Defendants

DISQUALIFICATION OF GEO. C. TAYLOR, JUDGE—Filed August 18, 1936

In this cause the judge of this court is of opinion that it would be improper for him to sit on its trial or to pass upon any preliminary questions that have been or may be presented testing the jurisdiction of the court. The reason for said belief on the part of the judge of the court is that members of his family are interested in the ownership of

companies that might be affected by the final decision of the case.

The clerk will enter this statement on the records of the court and certify forthwith an authenticated copy thereof to the Senior Circuit Judge for the Sixth Judicial Circuit, now in said circuit, so that further proceedings may be had under sections 17 and 18, title 28, United States Code.

Approved for entry.

(S.) Geo. C. Taylor, Judge.

[fol. 151] IN UNITED STATES DISTRICT COURT

DESIGNATION AND APPOINTMENT OF JOHN J. GORE AS JUDGE

It having been made to appear to me that the public interest so requires, I do hereby designate and appoint the Honorable John J. Gore, who is United States District Judge for the Middle District of Tennessee, to hold the United States District Court for the Eastern District of Tennessee in place of or in aid of the regular judge of such Eastern District.

Such designation and appointment are to continue in full force from and including this day to and including the 31st day of December, 1936; and the judge so designated is to have all the powers and be subject to all the duties contemplated by Sections 14, 18, and 19 of the Judicial Code, as now amended, being Sections 18, 22 and 23 of Title 28 of the United States Code.

Charles H. Moorman, Senior Circuit Judge, Sixth Judicial Circuit.

[fol. 152] IN UNITED STATES DISTRICT COURT

(Caption omitted)

AMENDMENT TO BILL OF COMPLAINT—Filed August 10, 1936

Now come the Complainants by their solicitors, and as of course, in accordance with Equity Rule 28, amend their Bill of Complaint, in the above-entitled cause as follows:

By striking out lines 10, 11, and 12 at page 75 thereof and inserting in place thereof the following words:

“That pending the final hearing in this cause this Court shall enjoin Defendants, their agents and employees, sep-

arately and severally, and by its final judgment, shall permanently enjoin Defendants, their agents and employees, separately and severally:"

By striking out lines 25, 26, 27, and 28 at page 78 thereof and inserting in place thereof the following words:

"(4) That in the event, during the pendency of this suit, the Defendants shall continue to prosecute the power program herein sought to be enjoined and shall construct or acquire facilities and works for the purpose of manufacturing and distributing electric power, this Court shall by its final decree require the Defendants to restore the conditions which existed at the time when this Bill was filed; and the Complainants pray that this Court shall by its final decree grant such other and further relief whether herein specifically prayed for or not as right and justice shall require and as to this Court shall seem meet, just and proper."

There are filed herewith the separate affidavits of:

Jo. C. Guild, Jr., President of The Tennessee Electric Power Company;

Laurence B. Howard, President of Franklin Power and Light Company;

W. J. O'Brien, President and General Manager of Memphis Power and Light Company;

O. J. Miller, President of Southern Tennessee Power Company;

J. S. Pevear, President of Birmingham Electric Company;

B. E. Eaton, President of Mississippi Power Company;

Newton M. Argabrite, Vice President of Appalachian Electric Power Company;

P. S. Arkwright, President of Georgia Power Company;

L. V. Sutton, President of Carolina Power and Light Company;

Paul O. Canaday, President of Holston River Electric Company;

[fol. 153] Thomas W. Martin, President of Alabama Power Company;

Newton M. Argabrite, Vice President of Kentucky and West Virginia Power Company, Inc.;

Newton M. Argabrite, Vice President of Kingsport Utilities, Inc.;

Henry D. Fitch, President of Kentucky-Tennessee Light and Power Company;

John Wisdom, President of West Tennessee Power and Light Company;

R. I. Brown, President of Mississippi Power and Light Company;

Charles E. Ide, Vice President of East Tennessee Light and Power Company; and

Charles E. Ide, Vice President of Tennessee Eastern Electric Company,

verifying the Bill of Complaint herein on behalf of each of said complainant companies, which said affidavits are presented and filed to be treated as the verification of the Bill of Complaint herein on the part of the Complainants named respectively in each of such affidavits.

Frantz, McConnell & Seymour, Trabue, Hume & Armistead, Baker, Hostetler, Sidlo & Patterson, by (S.) Charles M. Seymour, Solicitors for Complainants.

We certify that we have this day furnished to solicitor for Defendants copy of the foregoing amendment to Bill of Complaint.

Frantz, McConnell & Seymour, by (S.) Charles M. Seymour, Solicitors for Complainants.

August 10, 1936.

(For brevity the affidavits are omitted.)

[fol. 154] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION TO QUASH SERVICE OF SUBPOENA AND DISMISS BILL OF COMPLAINT FOR LACK OF JURISDICTION—Filed August 14, 1936

Now come the defendants, Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal, appearing specially for the sole purpose of filing this motion without submitting generally to the jurisdiction of the court and move the court to vacate and quash the

attempted service of the subpoena herein and to dismiss this case as to them for want of jurisdiction over the persons of said defendants, and in support of said motion, show unto the court the following:

The defendant Tennessee Valley Authority is an agency of the Government of the United States of America, created and existing by virtue of the Act of Congress known as the Tennessee Valley Authority Act of 1933 (Public No. 17, 48 Stat. 58; Title 16, U. S. C. A., Section 831, et seq.) and as such governmental agency, the said Tennessee Valley Authority is not subject to suit in the courts of the State of Tennessee, is not amenable to service of process in said State, and has not consented to be sued in the courts of said State.

The defendants Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal are sued in this cause not in their individual capacities but in their respective official and representative capacities as the Directors of the said Tennessee Valley Authority performing the duties conferred upon them by said Act of Congress, the purpose of said suit being to restrain and enjoin them in the performance of said official duties and the said defendants are not subject to suit in their official and representative capacities in the courts of the State of Tennessee, are not amenable to the service of process in said State, and have not consented to be sued in said courts.

The defendants further show unto the court that Section 8(a) of the said Tennessee Valley Authority Act of 1933 provides as follows:

"The Corporation shall maintain its principal office in the immediate vicinity of Muscle Shoals, Alabama. The Corporation shall be held to be an inhabitant and resident of the northern judicial district of Alabama within the meaning of the laws of the United States relating to the venue of civil suits."

The defendants allege that by the terms of this provision exclusive jurisdiction over civil suits against the defendant, Tennessee Valley Authority or against the Directors of said defendant, when sued in their official and representative capacities as such Directors, is vested in the United States District Court for the Northern Judicial District of Alabama and that no other court has jurisdiction over the persons of said defendants.

[fol. 155] The defendants would further show unto the court that the Chancery Court of Knox County, Tennessee, in which this action was originally filed, is without jurisdiction under any Tennessee statute or otherwise over suits against a governmental agency of the United States, established as such a public agency under a special Act of Congress, with its domicile and residence in the State of Alabama.

Wherefore, the defendants pray that this court will enter an order vacating and quashing the attempted service of process upon these defendants and dismissing this suit as to them for want of jurisdiction.

(S.) James Lawrence Fly, William C. Fitts, Jr., Solicitors for Defendants Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan, David E. Lilienthal, Appearing Specially Herein for the Sole Purpose of Contesting the Jurisdiction Over Defendants in This Cause and Moving to Quash Service Upon Said Defendants on Such Grounds.

[fol. 156] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MEMORANDUM OPINION OVERRULING MOTION TO QUASH SERVICE OF SUBPOENA AND DISMISS BILL OF COMPLAINT FOR LACK OF JURISDICTION—Filed October 17, 1936

The only question to be determined on this hearing is whether or not the Chancery Court of Knox County, Tennessee, has jurisdiction to try and determine the issues presented by the bill.

The case was removed from the Chancery Court of Knox County, under the provisions of Title 28 U. S. C. A. Section 71, to this Court.

Plaintiffs are public utility corporations, and are engaged in the business of generating, transmitting, distributing and selling electric energy at wholesale and retail in the boundaries of the respective political subdivisions in which they render service.

Defendant, The Tennessee Valley Authority, is a body corporate, created by an Act of Congress, approved May 18, 1933 (48 Stat. 58, 16 U. S. C. A. 831).

Defendants, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal, are averred to be residents of Knoxville, Knox County, Tennessee. They are the three chief executive officers, and sole members of the corporate authority of the Tennessee Valley Authority, and known as its Board of Directors, and as such, are charged with the duty of directing and the exercise of all the powers of the Tennessee Valley Authority. They are sued in their respective individual capacities, and also in their joint and several capacities as officers and directors of, and constituting the Governing Board of the Tennessee Valley Authority.

It is charged in the bill that the Tennessee Valley Authority has established and maintains its principal office and place of business in the City of Knoxville, Tennessee, from which it carries on a proprietary business as a public utility for the generation, transmission, distribution and sale of electric light and power in the States of Tennessee, Mississippi, Georgia and Alabama, and that they are exercising and threatening to exercise, and are performing and threatening to continue to perform, certain acts pursuant to alleged powers and authority claimed to be conferred upon them, in their official capacity, under the Tennessee Valley Authority Act of 1933, and amendments thereto, "but," it is charged, "which powers and authority are not actually lawfully or constitutionally conferred upon or vested in them, or in any of them thereby."

It is averred that the plaintiffs have a common interest in the subject of the litigation, and in obtaining the relief therein sought "in that all of them are affected in substantially in the same way by the operation of the Tennessee Valley Authority, and by the acts of the defendants sought to be justified under that Act." That the injuries from which they seek relief are caused by the operation of said act, which is averred to be illegal.

The bill is lengthy, and in order that there may be a clear understanding of the issues presented, a substantial summary of the charges is deemed necessary. It charges, in effect, that the complainants are severally public utility corporations, and each possesses all the rights, powers and franchises necessary under the laws of the several States in which it does business, for the generation, transmission and sale of electric energy at wholesale and retail, or at retail, in the territory served by it. Such rights, powers and privileges in general are indeterminate, or extend

over a substantial number of years in the future; that by the expenditure of millions of dollars, they have acquired a vast property and business, and have established a splendid financial credit, and a goodwill of much value; that they have invested many millions of dollars in tangible and intangible property of great value, and the defendants, acting collectively and individually, and also in concert with other persons and corporations, have conspired and confederated together, to destroy complainant's financial standing and good-will, and to confiscate and appropriate their properties; that the Tennessee Valley Authority Act purports to authorize, if it does not make mandatory the construction, development and operation of a great federally owned and operated public utility system for the generation, transmission, distribution and sale of electricity in the State of Tennessee and adjoining States, within the physical transmission distances of the generating plants constructed, and to be constructed; that the Act attempts to authorize a large indetermined number of dams and general works for the direct and primary purpose of creating a vast supply of electric power for the purpose of carrying on a federally-owned public utility, to establish the United States on a vast scale in the industry or business of producing, transmitting and selling electric power as a proprietary commercial venture; to launch the Federal Government upon a competitive commercial enterprise; to draw to the Federal Government the conduct and management of an intrastate business in the guise of disposing of property wrongfully acquired in a manner inconsistent with the foundation principles of our dual systems of government, to govern concerns reserved to the states. That to carry on its proprietary business as a commercial venture, the Act creates a corporation, having the usual powers and characteristics of a private business corporation; that the program authorized by the Act and promulgated by defendants, has no direct, real or substantial relation to navigation, nor to any other Constitutional function of the Federal Government; that any references in the Act to navigation or to any other Constitutional object of Federal powers are insubstantial, incidental and indirect, "and mere pretenses or pretexts under which it is sought to achieve an object not entrusted to the Federal Government but reserved to the States." That the policy declared by the Act creates or threatens to create, unfair competition with the business of

complainants and others; that the policy adopted invades the reserved rights of the States, "and threatens to take the respective properties of these complainants without due process of law;" that the number and capacity of steam and hydro-electric plants for the generation of electricity, the number and location of dams which the Government proposes to erect and turn over to the corporation in the Tennessee Valley basin, the quantity of electricity which defendants may manufacture for sale in a proprietary business, the extent to which, and the territory in which, the Tennessee Valley Authority may acquire and construct transmission lines for the distribution and sale of electric energy are undefined by the Act; that the Act purports to vest complete and uncontrolled discretion to the defendants in relation to such matters, as well as the right to permit or prohibit the construction of hydro-electric plants by others, including complainants, on the Tennessee River and its tributaries. That there are one hundred forty-nine available water-power sites upon the Tennessee River and its tributaries, which come under the domain and control of defendants by the Act; that complainants are unable to compete with defendants, who are financed by public money out of the Treasury of the United States, in the generation, transmission and sale of electricity; and that the execution of the program authorized by the statute, will necessarily and inevitably destroy all, or a substantial part, of the business and property of each of the complainants.

That the defendants, after the passage of the Tennessee Valley Authority Act, claiming to act pursuant to and under the authority of said Act, promulgated and officially announced a program for the construction, development and operation of a great federally owned and operated public utility system for the generation and distribution of electricity in the territory within the physical transmission distances of the electric generating plants to be constructed under the program. That defendants propose and plan to take the market and property of complainants, without paying just compensation therefor; that the program promulgated calls for elimination in this area of existing privately [fol. 159] owned public utilities to the end that the Tennessee Valley Authority shall have a compact market territory in which it will be the only purveyor of electric services as a public utility; that the Tennessee Valley Authority proposes to acquire such transmission lines as it can use, at its

own price, or to render them valueless through the construction of duplicate lines, with Federal funds. That defendants decline to sell power to existing privately owned utilities other than as a temporary expedient. That it is the announced purpose of the defendants to appropriate the market for power throughout the entire area within commercial and economic transmission distances of its generating plants; to establish complete public ownership of utility generating transmission and retail or distribution facilities for electricity in a large area of the Nation; to establish a policy of rate making which will permit domestic and rural use at the expense of industrial use; to regulate local intrastate electric rates; to supplant State regulation of public utilities; to establish a "yardstick" to regulate the rates of privately owned utilities in, or adjoining the area "or elsewhere throughout the United States"; to promote public ownership of utilities "throughout the Nation as well as within the selected area."

That the power to be produced (except power to be produced through the operation of the facilities at Wilson Dam) under the program promulgated by defendants is not surplus power, incidentally produced by Federal works, but power which is to be deliberately produced by defendants for the express purpose of distributing and selling such power as a proprietary business enterprise, to effectuate Federal regulation of rates and service for intrastate electric service and to promote public ownership of public utilities as a part of a permanent "National Power Policy." That the promulgation of the program casts a cloud upon the rights of each of the complainants and threatens each of them with irreparable injury; that defendants, in addition to having assumed use, control and possession of Wilson Dam and Nitrate plant #2, steam plant, have undertaken the construction of Norris Dam and power plant on the Clinch River, the Wheeler Dam and Power plant in the vicinity of Muscle Shoals, in Alabama, the Pickwick Landing Dam, the Guntersville Dam and power project in Alabama, and have authorized the beginning and construction of the Chickamauga Dam and power plant near Chattanooga, and have recommended to Congress the construction [fol. 160] of other dams in the territory. That they have entered into contracts for the sale of power to the

cities of Knoxville, Memphis and other towns in Tennessee, Alabama and Mississippi. That defendants, by duress and coercion, not merely compelled privately owned utilities to sell certain of their local transmission systems, but have by contract of purchase, undertaken, in defiance and disregard of the sovereignty and rights of the State, to control and regulate the rates which the privately owned utilities should continue to serve, in the territory in which the defendants were temporarily permitted to remain in business, and thereby sought to oust the jurisdiction of the States and of their Regulation Commissions over the rates of such privately owned utilities.

It is averred that defendants have conducted, and are still conducting, a studied and systematic campaign of propaganda, solicitation and local political activity in the area designated in the promulgated program "for the purpose of disrupting the established business relations between the complainants and their customers, destroying the good will, and seizing the markets which the complainants have built up through years of effort and the investment of vast sums of money, and inducing and inciting the residents of communities served by complainants under high pressure propaganda financed with taxpayers' money, to cooperate with the defendants in their scheme to develop a great federally owned and operated electric power utility as an absolute monopoly in the vast territory marked by the defendants for appropriation; "that this campaign has been carried on through public addresses of, and personal solicitation, by the individual defendants and their agents, local political activity, radio addresses, magazine articles and dissemination of sensational pamphlets and posters, mailed at taxpayers' expense under Government frank, throughout and beyond the area designated in the promulgated program.

That defendants have solicited large industrial customers of certain of the complainants and for the purpose of obtaining such customers, the defendants have offered to supply electricity for industrial purposes at arbitrary, non-compensatory, confiscatory and discriminatory rates. They have attempted to persuade some customers of complainants to breach existing contracts, all in violation of the valid laws of the States of Tennessee, Alabama and other states in which the defendants are operating or seeking to operate; that complainants are unable to meet such unfair competi-

tion, not only because the rates quoted are noncompensatory [fol. 161] and made possible only by subsidies from federal and state taxpayers, but also because complainants are forbidden by State law to make discriminatory rates for competitive purposes.

In exhibits to the bill, are set out alleged quotations from public speeches, documents, letters, etc., asserted to have been uttered and circulated by the individual defendants, tending to show that the extent of the proposed program is to electrify America, by carrying out a "National Power Policy."

Many other acts and utterances too numerous to mention, which are alleged to be unlawful, are detailed in the bill.

The bill prays, among other things, that the Court, upon final hearing "shall adjudge and decree that the Tennessee Valley Authority Act of 1933, as amended, the power program authorized by said Act, and the power program promulgated by the defendants are severally in violation of the Constitution of the United States." And, that the Court shall, by its final judgment enjoin defendants, their agents and employees separately and severally, from (a) further executing the Tennessee Valley Authority Act of 1933, the power program authorized by said Act, or the power program promulgated by the defendants, and in general from engaging in the business of purchasing, constructing and otherwise acquiring works for the purpose of creating and supplying electric power for the use of carrying on a Federally owned public utility; from dispensing electricity generated at dams or other works constructed, by or on behalf of, the United States; for any purpose constructing, purchasing, or otherwise acquiring hydroelectric plants, electric stations, electric transmission lines, electric distribution systems, or other power facilities, except such transmission lines as may be necessary for the transmission of power generated at Wilson Dam to the extent that the production and sale of power at Wilson Dam has been held legal and not to exceed the capacity which there existed as the Dam was originally constructed; from carrying on a campaign of organized propaganda at Federal expense to promote public ownership and operation of electric utilities under control or in privity with or dominated by the Tennessee Valley Authority; from engaging in any way in practices which constitute unfair competition with any of the

complainants in territory served by them, etc., etc., and for general relief.

Defendants entered a special appearance for the purpose [fol. 162] of filing a motion to quash service of subpoena and dismiss the bill of complaint for lack of jurisdiction.

The motion is based upon the allegation that the Tennessee Valley Authority is an agency of the Government of the United States of America, created and existing by virtue of the Act of Congress known as the Tennessee Valley Authority Act of 1933, and as such Governmental agency, it is not subject to suit in Courts of the State of Tennessee, is not amenable to service of process in said State, and has not consented to be sued in the Court of said State.

Defendants, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal, aver that as Directors of the Tennessee Valley Authority, they are performing duties conferred upon them by an Act of Congress, and the suit being to restrain and enjoin them in the performance of official duties, they are not subject to suit in their official and representative capacities in the Courts of Tennessee, and are not amenable to the service of process in said suit, and have not consented to be sued in said Court.

The defendants further allege in their plea, that by the provisions of Section 8(a) of the Tennessee Valley Authority Act of 1933, exclusive jurisdiction over civil suits against them is vested in the United States District Court for the Northern Judicial District of Alabama, and that no other Court has jurisdiction over them.

Section 8(a) of the Tennessee Valley Authority Act reads:

"The corporation shall maintain its principal office in the immediate vicinity of Muscle Shoals, Alabama. The corporation shall be held to be an inhabitant and resident of the Northern Judicial District of Alabama within the meaning of the laws of the United States relating to the venue of civil suits."

Defendants aver in their plea that even if Section 8(a) of the Tennessee Valley Authority Act does not limit the forum in which they may be sued to the Northern Judicial District of Alabama, the Chancery Court of Knox County, Tennessee, cannot entertain jurisdiction over them because there is no statute in Tennessee vesting jurisdiction in a

State Court over an agency or instrumentality of the United States Government, and that the individual defendants are the agents or directors of said agency.

[fol. 163] Plaintiffs insist that the Tennessee Valley Authority is a corporation, claiming existence under the laws of the United States, engaged in a proprietary business, and that therefore, under the Tennessee Statute, is subject to suit in the State Courts, especially in "so far as relates to any transactions had, in whole or in part, within the State, or any cause of action arising here * * *," and also, independently of any statute attempting to confer jurisdiction, the Chancery Court of Knox County had jurisdiction under the common law.

Plaintiffs further insist that the Tennessee Valley Authority Act, properly construed, does not purport to impose any limitations upon the jurisdiction of any State or Federal Court over the Tennessee Valley Authority, or its directors, even in relation to acts within some Constitutional grant of power.

The statutory jurisdiction of a Tennessee State Court to entertain a suit against foreign corporations is found in Sections 8676 and 8677 of Williams Tennessee Code, 1932, which read:

"8676: Any foreign corporation claiming existence under any laws of the United States or any other State, or of any country foreign to the United States, or any business trust found doing business in this State, shall be subject to suit here to the same extent that corporations of this State, are by the laws hereof, liable to be sued, so far as relates to any transactions had, in whole or in part, within this State, or any cause of action arising here, but not otherwise."

"8677: Any corporation or trust having any transaction with persons, or having any transaction concerning any property situated in this State, through any agency whatever, acting for it within the State, shall be held to be doing business here within the meaning of Section 8676."

Defendants strongly rely upon the case of Board of Directors of the St. Francis Levee District vs. Bodkin Bros., 108 Tenn. 700, which is the leading case in this State upon that subject. The St. Francis Levee District was a public corporation created by the Act of the Legislature of the

State of Arkansas. The Act designated certain individuals as directors, and provided that they, and their successors in office would constitute a body politic and corporate by the name and style of the Board of Directors for the St. Francis Levee District, and by that name sue and be sued, and have [fol. 164] perpetual succession for the purposes therein-after designated. The duties of the Board were declared to be to levee the St. Francis front of the Mississippi River in the State of Arkansas, and to maintain the same by building, rebuilding, repairing or raising levees on the Arkansas side of the River, and for the purposes of carrying into effect the objects and purposes of the Act, the Board was given power, among other things, to make contracts for construction and performance of said work.

The Board of Directors had an office in the City of Memphis, Tennessee, where some of its fiscal operations were transacted, and it had on deposit to its credit various sums of money in the several banks of that city.

Bodkin Brothers, citizens of Shelby County, Tennessee, entered into a contract with the Board of Directors for the construction of a portion of the levee.

The suit was brought in the Circuit Court of Shelby County, Tennessee, to recover damages for an alleged breach of the contract.

Defendants filed a plea in abatement to the declaration, averring in substance, that it was a public and governmental agency of the State of Arkansas, created by the Legislature of that State for the purpose of constructing levees, and setting forth the powers and duties of said Board under the Act creating it; that its situs was in the State of Arkansas, and that the contract sued upon was made in that State, where it was to be performed. It then averred that the Board was not liable to suit in the State of Tennessee, and that the service of subpoena attempted to be made upon its officers in Tennessee, did not constitute a legal service upon the Board.

The Supreme Court of Arkansas had previously adjudged the Board to be a public corporation, clothed with Governmental duties and functions, including the power to levy and collect public taxes. (The Supreme Court of the United States in *Ashwander vs. Tennessee Valley Authority*, 297 U. S. 227-402, has adjudged that defendant corporation is "an agency of the Federal Government.")

In passing upon the questions raised by the plea in abatement, the Supreme Court of Tennessee said that the Board of Directors "is purely a governmental agency or instrumentality of the State of Arkansas charged with the performance of duties and functions that vitally concern the general public," that "the meaning of the Act is that the State of Arkansas has given its consent to suits against [fol. 165] said Board in that State where said Board has its situs, and since it cannot have a situs outside of the State of its incorporation, it is not subject to suit in a foreign state." And further that "We can perceive no more reason why such an agency of the Government can be sued out of the State of its domicile than could a county, municipality, a Board of Education, a Board of Tax Assessors, although each were incorporated and empowered to sue and made liable to suit."

The decision of the Court in that case is supported by decisions of courts of other jurisdictions, such as *Oil City vs. McAbey*, 74 P. St. 249; *Lehigh County v. Kleckner*, 5 W. S. (Pa.) 181; *Pack v. Greenbush Township*, 62 Mich. 122; See also *Nashville v. Webb*, 114 Tenn. 432; *Lambert v. Baltimore & Ohio R. R.*, 258 U. S. 377, decided since the decision in the *Bodkin* case.

The *Bodkin* case is authority upon the proposition that a suit cannot be maintained against a public corporation or governmental agency not engaged in a proprietary business in a court other than at the location of its situs (unless permission is expressly granted by its charter) for transactions lawfully committed within its delegated powers; but the facts of that case are entirely different from the facts of the instant case. There, no question as to the constitutionality of the Act creating the Board of Directors was involved, nor was it contended that the Board, in entering into a contract with *Bodkin Brothers*, exceeded the powers granted by its charter, nor that the contract was in any wise illegal, or *ultra vires*. It was found by the Supreme Court of Tennessee that the Board of Directors was not "a trading or commercial corporation organized for private investment," hence the Court held that the action against the Board of Directors was local, and not transitory, and therefore, suit could not be maintained in a jurisdiction other than that of its situs. In the case at bar, jurisdiction of this Court is invoked upon the ground, among others, that the power program provided for in the Act, is prohibited by the

Constitution of the United States, that the power program promulgated by defendants and the acts committed and threatened to be committed by them, are not authorized by the Act.

The Act creating the Tennessee Valley Authority provides that it may sue and be sued; locates its principal office in the vicinity of Muscle Shoals, Alabama, and provides it be an inhabitant and resident of the Northern Judicial District of Alabama within the meaning of the laws of [fol. 166] the United States relating to the venue of civil suits.

There is a distinction between an action to enjoin an agent, acting within the powers lawfully conferred upon him by a valid statute, and an action against an agent acting within the powers conferred upon him by an invalid statute, or by an agent acting in excess of the powers conferred upon him by a valid statute. *Philadelphia v. Stimson*, 223 U. S. 605, 619; *Scranton v. Wheeler*, 179 U. S. 141, 152; *Lane v. Watts*, 234 U. S. 525; *U. S. v. Lee*, 106 U. S. 196; *Hammer v. Dagenbart*, 247 U. S. 251; *Goltra v. Weeks*, 271 U. S. 536; *Bank v. Devine*, 125 U. S. 98.

I think it well established by the foregoing authorities that if a public officer be acting within the scope of the powers granted by a valid statute, and the statute creating the office or agency, limits the forum in which he may be sued, suit may be maintained only in the forum designated in the Act; but, if the agent be acting, or proposing to act, in such manner as to invade the personal rights secured by the Constitution to a citizen, or to inflict upon, or threaten to do damage to the property of a citizen, under an invalid statute, or if his acts, or proposed acts, be in excess of the power granted by a valid statute, he divests himself of his official character and becomes a private citizen, subject to suit in any court of competent jurisdiction in which the unlawful act is committed, or in which he may be found: *Philadelphia v. Stimson*, *supra*; *Scranton v. Wheeler*, *supra*; *Lane v. Watts*, *supra*; *United States v. Lee*, *supra*; *Hammer v. Dagenbart*, *supra*; *Goltra v. Weeks*, *supra*; *Ferris, et al., v. Wilbur, Secretary of Navy*, 27 Fed. (2d) (C. C. A. 4) 262; *Sloan Shipyards, et al., vs. U. S. Fleet Corp.*, 258 U. S. 566; *Devine v. Bank*, *supra*, and the suit may be maintained against the individual attempting to so act, even without joining his superior officer in the suit: *Colorado v. Toll*, 268 U. S. 228.

In *Devine v. Bank*, *supra*, it is said he "who assumes to exercise powers not appertaining to his office, or not conferred upon him by law, such person is in so far forth not a Federal officer, and not protected by his office, and may be sued in a state court of the state embracing such territory, just as if he were a private citizen, by persons injured through such unlawful acts. *Teal vs. Felton*, 12 How. 284, 13 L. Ed. 990; *Buck v. Colbath*, 3 Wall. 334, 18 L. Ed. 275; *Slocum v. Mayberry*, 2 Wheat. 1, 4 L. Ed. 169; *Scranton v. Wheeler*, 179 U. S. 141, 151, 21 Sup. Ct. 48, 45 L. Ed. 126, 133."

[fol. 167] In *Philadelphia v. Stimson*, *supra*, pages 619 and 620, it is said:

"If the conduct of the defendant constitutes an unwarrantable interference with property of the complainant, its resort to equity for protection is not to be defeated upon the ground that the suit is one against the United States. The exemption of the United States from suit does not protect its officers from personal liability to persons whose rights of property they have wrongfully invaded. *Little v. Barreme*, 2 Cranch, 170, U. S. v. *Lee*, 106 U. S. 196, 220; *Belknap v. Schild*, 161 U. S. 10, 18; *Trindal v. Wesley*, 167 U. S. 204; *Scranton v. Wheeler*, 179 U. S. 141, 152. And in case of an injury threatened by his illegal action, the officer cannot claim immunity from injunction process. The principle has been frequently applied with respect to state officers seeking to enforce unconstitutional enactments. *Osborn v. Bank of U. S.*, 9 Wheat. 738, 843, 868; *Davis v. Gray*, 16 Wall, 203; *Pennoyer v. McConnaughy*, 140 U. S. 1, 10; *Scott v. Donald*, 165 U. S. 107, 112; *Smyth v. Ames*, 169 U. S. 466; *Ex parte Young*, 209 U. S. 123, 159, 160; *Ludwig v. Western Union Telegraph Company*, 216 U. S. 146; *Herdon v. C., R. I. & P. Ry. Co.*, 218 U. S. 135, 155; *Hopkins v. Clemson College*, 221 U. S. 636, 643-645. And it is equally applicable to a federal officer acting in excess of his authority or under an authority not validly conferred. *Noble v. Union River Logging R. R. Co.*, 147 U. S. 165, 171, 172; *School of Magnetic Healing v. McAnnulty*, 187 U. S. 94.

"The complainant did not ask the court to interfere with the official discretion of the Secretary of War, but challenged his authority to do the things of which complaint was made. The suit rests upon the charge of abuse of

power, and its merits must be determined accordingly; it is not a suit against the United States."

In *Appalachian Power Co. v. Smith*, 67 Fed. (2d) (C. C. A. 4) 454, Judge Parker, speaking for the Court said:

"It is well settled, of course, that equity will in a proper case restrain officials of the government from acts constituting an invasion of individual rights where such acts are [fol. 168] not authorized by statute, or where the statute authorizing them is void because in conflict with some provision of the Constitution."

In *Sloan Shipyards v. U. S. Fleet Corp.*, *supra*, it is said:

"If what we have said is correct, it cannot matter that the agent is a corporation rather than a single man."

Certainly Congress may create a corporate agency for a lawful and Constitutional purpose, and in so doing may provide the forum in which such agency may be sued. And, so long as it acts within the Constitutional powers granted, it may not be sued elsewhere. But, if the Act be invalid, or if the agency assumes powers not conferred, it is stripped of its immunity to be sued in the forum designated by the Act creating it, and assumes the role of an individual, who is answerable for his wrongs wherever found.

It is hardly reasonable to suppose that Congress intended to make these defendants immune from suit in any jurisdiction except in the Northern Judicial District of Alabama, for damages resulting by their unauthorized acts of whatever character.

Upon a former hearing, I was of opinion that it was necessary to pass upon the validity of the Tennessee Valley Authority Act to determine whether the Chancery Court of Knox County had jurisdiction of the cause. If it did not, this Court acquired none by a removal of the cause, and I was in doubt as to whether the averments in the bill to the effect that defendants were committing unauthorized acts to the injury of complainants, and threatening to continue to commit acts ultra vires the power granted by the Tennessee Valley Authority Act, were sufficient to vest the Chancery Court of Knox County with jurisdiction to entertain the suit. A further study of the bill and the authorities,

convinces me that it is unnecessary to pass upon the Constitutionality of the Tennessee Valley Authority Act to determine that question. But it is necessary that I scrutinize the bill to determine whether real, substantial Constitutional questions are involved, and that apparently, the bill is filed in good faith, and is not frivolous. *City Railway Co. vs. Citizens Railway Co.*, 166 U. S. 557; *I. C. Railroad vs. Adams*, 108 U. S. 28; *Pacific Electric Ry. Co. vs. Los Angeles*, 194 U. S. 112; *South Covington Ry. Co. vs. Newport*, 259 U. S. 27; *Flanders v. Coleman*, 250 U. S. 228.

There may be cases where it would be proper to look to the Constitutionality of an Act to determine the question of jurisdiction, but I think the case made by the averments in this bill, brings it within the jurisdiction of this Court, regardless of the Constitutionality of the Tennessee Valley Authority Act. I think the averments, if proven, strip the defendants of their official character and constitute them private citizens in that regard, and, as seen above, when such conditions exist, they are subject to suit in any court of competent jurisdiction where they are committing said illegal and unconstitutional acts, and where process can be served.

I deem it unnecessary to pass upon plaintiff's proposition that "The Tennessee Valley Authority Act does not impose any limitations upon the jurisdiction of any State or Federal Court over the Tennessee Valley Authority, or its directors, even in relation to acts within some Constitutional grant of power, because jurisdiction will be taken upon another ground.

The motion to dismiss will be overruled. A decree will be entered accordingly.

This the 16th day of October, 1936.

(S.) Gore, Judge.

[fol. 169] IN UNITED STATES DISTRICT COURT

(Caption omitted)

DECREE OVERRULING MOTION TO QUASH SERVICE OF SUBPOENA
AND DISMISS BILL OF COMPLAINT—Filed October 19, 1936

This cause came on to be heard upon the motion of the defendants to quash service of process and to dismiss the bill of complaint for want of jurisdiction, and upon briefs

and argument of counsel, and upon consideration, it is by the court

Ordered, Adjudged and Decreed, that said motion be and the same is hereby overruled and denied to all of which the defendants severally reserve an exception.

(S.) Gore, District Judge.

Dated this 19th day of October, 1936.

O. K. Frantz, McConnell & Seymour by Charles M. Seymour, Sols. for Compts.

O. K. T.V.A., et al. James Lawrence Fly, per H. H. F.

[fol. 170] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION TO DISMISS—Filed October 20, 1936

Now comes the defendants, Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal, by their solicitors, and move the court to dismiss the bill of complaint heretofore filed in this cause and each of said defendants separately and severally set down and assign the following separate grounds for said motion:

1. The bill is fatally defective as a pleading for the reason that it is so filled with political propaganda and confusing allegations of remote and speculative contingencies that it is unintelligible.

2. The bill is fatally defective because the allegations are so vague, indefinite and general as not to inform the defendants of the nature of the cause of action that they are called upon to defend.

3. The bill is fatally defective because the allegations are argumentative, evidentiary and impertinent and as such are in violation of the equity rules.

4. It affirmatively appears from the allegations of said bill that the complainants are attempting to obtain a decision, apart from definite and concrete acts threatening immediate interference with any legal rights of complainants, on abstract and hypothetical questions as to the rights

of the parties in possible contingencies not involving a present specific controversy, which the Supreme Court of the United States has already held "too vague and ill-defined to admit of judicial determination."

5. The bill fails to allege sufficiently the character, extent and immediacy of the injury inflicted or threatened to be inflicted upon the complainants by any acts of the defendants, and the manner in which such injury will be caused.

6. The bill is multifarious because of a misjoinder of parties complainant.

7. The bill is multifarious because of a misjoinder of causes of action.

8. It appears from the allegations of said bill of complaint that there is no joint cause of action in which each of the complainants has a legal interest.

9. It appears from the allegations of said bill of complaint that there is no one justiciable controversy existing between all of the complainants on one side and the defendants on the other. If any justiciable controversies have been alleged, they are separate and distinct and are not properly joined in this suit. If any justiciable controversies have been alleged, parties having no interest therein have been improperly joined as complainants.

[fol. 171] 10. It affirmatively appears from the allegations of said bill of complaint that the complainants are attempting to obtain a sweeping declaratory judgment to determine the validity of an alleged national program upon vague and indefinite allegations without a sufficient showing of actual or threatened overt acts inflicting injury upon each of the complainants.

Wherefore, the defendants pray that this court will enter an order dismissing the bill of complaint upon the grounds set out herein.

(S.) James Lawrence Fly, John Lord O'Brian, William C. Fitts, Jr., Solicitors for Defendants, Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal.

[fol 172] IN UNITED STATES DISTRICT COURT

(Caption omitted)

**MEMORANDUM OPINION OVERRULING MOTION TO DISMISS—
Filed November 9, 1936**

I think the motion to dismiss should be overruled. If defendants desire, they may rely in their answer, upon the grounds set out in the motion to dismiss.

If the bill is vague, indefinite, confusing and too general or uncertain, as insisted by the motion and by counsel for defendants in their brief, the remedy is not by motion to dismiss, but, under General Equity Rule No. 20, by motion for a better statement of the nature of the claims, or, for further and better particulars of any matter stated in the pleadings.

I grant that the bill is lengthy and is, in some particulars, argumentative, but this objection is not misleading to defendants, or sufficient to justify the Court in dismissing the bill, or directing that it be redrafted. No advantage would enure to defendants should the impertinent or argumentative matters be stricken out as authorized by General Equity Rule No. 21. Such allegations when harmless, will not be stricken out on the claim of necessity for brevity only.

I also think that the bill is not multifarious because of misjoinder of parties complainant, or misjoinder of causes of action.

The tenth and last objection to the bill "that the complainants are attempting to obtain a sweeping declaratory judgment to determine the validity of an alleged national program upon vague and indefinite allegations without a sufficient showing of actual or threatened overt acts inflicting injury upon each of the complainants" is not sustained by the allegations of the bill. The gravamen of the bill is that the Act under which defendants are acting, the power program authorized by the Act, and the power program promulgated under color of the Act, and things which defendants are doing in the execution of such power program, are not authorized by the Constitution, and that the defendants are engaged in carrying out a single program, plan, or conspiracy, the execution of which will irreparably

injure, if it does not totally destroy, the property and business of each of the complainants; many specific acts done, and threatened to be done, by defendants in carrying out the program, are detailed and averred to be in excess of the authority granted by the Act, which applies to all of complainants, and hence all the complainants are jointly interested in the subject-matter of the litigation. The complainants may be interested in the outcome of the litigation in varying degrees, and the alleged injury threatened to be inflicted may not be uniform, but the relief sought by each and all of the complainants is similar, predicated upon the same alleged unlawful and unauthorized acts of defendants, and the same amount of evidence necessary to establish the alleged unlawful and unauthorized acts of defendants, as against one of the complainants, if it should sue alone, would also be necessary to make out a case in an action brought by all the complainants jointly.

[fol. 173] In order that the case may be appealed and the questions in issue be finally determined, I am extremely anxious to bring the case to a trial upon its merits at the earliest possible moment. Time is an important element in this litigation; the public, as well as the litigants, is vitally interested in an early termination of the controversy. I think the importance of a final decision of the questions involved, justifies the expression of this desire.

This the 7th day of November, 1936.

(Signed) Gore, Judge.

[fol. 174] IN UNITED STATES DISTRICT COURT

(Caption omitted)

DECREE OVERRULING MOTION TO DISMISS—Filed November 12, 1936

This cause came on to be heard upon the motion to dismiss the bill of complaint filed by the defendants herein on October 20, 1936, and briefs and arguments of counsel, and upon consideration, it is by the Court ordered, adjudged and decreed that said motion to dismiss be and the same is hereby overruled and denied, and that the respective defendants be given until November 24, 1936, within which to

answer the bill of complaint, to all of which the several defendants severally reserve exceptions.

Dated this 9th day of November, 1936.

(S.) Gore, District Judge.

O. K. as to Form. (S.) Frantz, McConnell & Seymour;
by Charles M. Seymour, Solicitors for Complainants.

O. K. as to Form. (S.) William C. Fitts, Jr., Solicitors
for Defendants.

[fol. 175] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ANSWER OF TENNESSEE VALLEY AUTHORITY ET AL.—Filed
November 24, 1936

Part I

Now come the defendants Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal and, severally answering the bill of complaint heretofore filed herein, say:

1

The defendants are not informed as to the allegations of Section I of the bill of complaint and therefore neither admit nor deny the same, but require strict proof thereof if deemed material.

2

Except as herein expressly admitted, the defendants deny the material allegations of Section II of said bill of complaint. Defendants admit that the Tennessee Valley Authority is a body corporate created by an Act of Congress approved May 18, 1933, known as the Tennessee Valley Authority Act of 1933, with the right to sue and be sued as therein prescribed, and admit that it has established and maintains an office in the City of Knoxville, Tennessee, but deny that said office is its principal office, and deny all other allegations in said section to the effect that the said defendant is carrying on a proprietary business as a public utility in the State of Tennessee, or elsewhere. The defendants allege that all of the acts that are being performed by the defendant Tennessee Valley Au-

thority are being legally performed pursuant to the powers and authority vested in it by the said Tennessee Valley Authority Act. The defendants admit that the defendants Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal are over the age of twenty-one (21) years and are the three chief executive officers and members of the Board of Directors of the Tennessee Valley Authority.

3

Except as expressly admitted herein, the defendants deny the material allegations of Section III of said bill of complaint. Defendants admit that Harold L. Ickes is the duly appointed and acting Administrator of the Federal Emergency Administration of Public Works. Defendants allege that under the allegations of the bill of complaint, the said Ickes is a necessary party defendant, and this suit cannot be maintained in the absence of him as such defendant.

4

Defendants deny the material allegations of fact contained in Section IV of said bill of complaint and particularly deny that the complainants severally or as a class have any legal standing to maintain this suit and deny [fol. 177] that there is any single or unlawful plan affecting any legal interest of the complainants severally or as a class, or that the various complainants are affected in the same or substantially the same manner by the Tennessee Valley Authority Act or the acts of the defendants done pursuant thereto, or that the complainants severally or as a class may challenge in this suit the validity of said Tennessee Valley Authority Act of the alleged plan or program of the defendants. Defendants further allege that, if the facts alleged in the bill regarding the alleged acts of the defendants are deemed material, said facts pertain to different complainants and necessarily differ and vary with respect to each and every complainant. And, as more fully hereinafter appears, there are so many separate and distinct questions, fundamental in character, of fact and law as to each of the particular complainants which do not relate to the cause of action, if any, of all the complainants severally or as a class, as to gravely prejudice the defend-

ants in endeavoring to prepare for and defend the many, diverse, and confused cases attempted to be stated in the bill. The defendants further deny that either the Tennessee Valley Authority Act or the acts of the defendants done pursuant thereto are directed against the complainants severally or as a class, or with any intent to injure any of the complainants, and allege that all the acts done by the defendants have been performed in furtherance of the statute and the purposes therein declared. Numerous of the complainants are so situated that they have not been and are not damaged or threatened with damage by any of the acts alleged to have been done or threatened to be done.

5

Defendants deny the material allegations contained in [fol. 178] Section V of said bill of complaint and for further answer say that there are special and different defenses as to various complainants; for example, that the complainants Tennessee Electric Power Company, Mississippi Power Company, Georgia Power Company, and Alabama Power Company, being the component companies in the so-called Commonwealth and Southern system, are estopped from maintaining this suit and calling into question the legality of the Tennessee Valley Authority Act and acts relating to the disposition of electricity under that statute for reasons hereinafter fully set forth; that there is a separate defense of res judicata to the suit of the complainant Georgia Power Company, as appears more fully hereinafter, and that there is a special defense of res judicata to the suit of the complainant Alabama Power Company, as will appear more fully hereinafter; other defenses hereinafter set forth pertain to the franchises, properties, contracts, and business operations of the various individual complainants.

Defendants further allege as a separate and additional defense to all of the complainants that, if the complainants ever had any right to relief because of the invalidity of the alleged power program or the existence of a single unlawful plan, as distinguished from a right to relief from definite and concrete acts affecting particular complainants each of the complainants has been guilty of laches sufficient to bar the maintenance of this suit, for the reason that they have delayed the bringing of this suit for a period of three

years during which they have had full notice of the existence of the Tennessee Valley Authority Act and the alleged promulgation of the so-called plan or program, as appears from the allegations of the bill. Defendants allege that during all of this period the complainants have had [fol. 179] full notice that the Tennessee Valley Authority was proceeding at great expense to the Government with the construction of certain dams, reservoirs, and appurtenant navigation and power facilities, described in said bill of complaint; that it was proceeding with the acquisition and construction of certain transmission lines to be utilized in the transmission and sale of electric energy available at said dams, and that large sums of money were being expended in permanent investments in reliance upon the power and authority vested in the Tennessee Valley Authority by the terms of the Act of Congress. Having rested upon their alleged rights during all of said period while vast expenditures were being made, the complainants, and each of them, are effectively barred from maintaining this suit.

6

Defendants are not informed as to the allegations of Section VI of said bill of complaint and therefore neither admit nor deny the same, but demand strict proof thereof if deemed material.

7

The defendants are not informed as to the allegations of Section VII of said bill of complaint and therefore neither admit nor deny the same, but demand strict proof thereof if deemed material and, for further answer, say:

That certain of the complainants, namely the Alabama Power Company and the Mississippi Power Company, have conveyed to the defendant Tennessee Valley Authority all rights, powers, privileges, franchises, and contracts in some of the territories where injury or threatened injury is alleged, as more fully appears hereinafter.

On information and belief defendants further allege that [fol. 180] the nature and extent of the alleged rights, privileges, and franchises of the various complainants vary widely; that various complainants are operating in various rural areas outside of municipal boundaries without the benefit of any franchise or property right to do business

in said areas, either because the state laws do not require franchises for utility operations in said areas or because complainants have failed to conform to state requirements that such franchises be secured, and that certain of the complainants are operating in various of the cities, where threatened injury is alleged, without franchises or under invalid claims of franchises, as appears more fully hereinafter.

8

The defendants are not able to state whether or not the so-called maps attached to the bill of complaint and marked Exhibit "A" and Exhibit "B" are accurate representations and therefore neither admit nor deny the truth of these allegations, but require strict proof thereof if deemed material. Except as hereinafter fully alleged, the defendants are not informed as to the other allegations in Section VIII of said bill of complaint and therefore neither admit nor deny the same, but demand strict proof thereof if deemed material.

9

The defendants deny the material allegations of fact contained in Section IX of said bill of complaint and, for further answer, say:

That complainants Tennessee Electric Power Company and Alabama Power Company are without sufficient dependable generating capacity to supply the demand for electric service in the areas in which they operate but are dependant upon purchases of power from other sources, [fol. 181] including the Tennessee Valley Authority; that as hereinbefore and hereinafter alleged, these complainants and the Georgia Power Company and the Mississippi Power Company, composing the Commonwealth and Southern system, have continuously purchased and used and are still purchasing and using substantial quantities of electric power from the defendant Authority in each year since the passage of the Tennessee Valley Authority Act.

That there is an adequate supply of generating capacity to meet present demands, or demands in the predictable future, in the areas served by the complainants apart from surplus power generated by the defendant Tennessee Valley Authority; that, as recent studies by the Federal Power Commission disclose, the areas in which the complainants operate are faced with an imminent power shortage unless

there are substantial additions to dependable generating capacity.

That there is a market for electric energy beyond that supplied by them in the areas which complainants claim to serve; that at the time of the passage of the Tennessee Valley Authority Act only approximately 3% of the rural residents in the said areas in which complainants generally were operating enjoyed the benefits of electric service; that many of these unserved rural inhabitants had long been anxious and willing to obtain electric service; that the complainants had failed to serve these rural inhabitants; that in the territory described by the complainants as served by them, there are and probably will be many industrial users of electricity not supplied or served by the complainants, that in the area described by the complainants as served by them, there are a number of municipalities serving their residents with electricity which have not for some years and do not now purchase electricity from the complainants. There is a general and rapidly increasing demand for electric energy in the vicinity of the Tennessee River basin.

[fol. 182]

10

The defendants are not informed as to the allegations contained in the first sentence of Section X of said bill of complaint and therefore neither admit nor deny the same but demand strict proof thereof if deemed material. Defendants are informed that the remaining allegations of said Section X are conclusions of law which they are not required to answer but if construed to be allegations of *act*, (fact) deny the same if deemed material.

11

The defendants deny the material allegations of fact contained in Section XI of said bill of complaint.

12

The defendants deny the material allegations of fact contained in Section XII of said bill of complaint and further state that said allegations are irrelevant, argumentative, and evidentiary, and have no bearing upon the issues in this cause.

The defendants are informed that the allegations of Section XIII of said bill of complaint are conclusions of law and argumentative statements which they are not required to answer, but if construed to be allegations of fact deny every allegation thereof, and for further answer say:

The Tennessee Valley Authority Act of 1933 authorizes the construction of such dams upon the Tennessee River and its tributaries as are necessary for the express purposes of improving navigation and controlling destructive flood waters in the Tennessee and Mississippi River Basins.

The defendants allege that the problem of improving [fol. 183] navigation upon the Tennessee River and its tributaries has been considered by the Congress of the United States almost continuously since 1824. In the period between 1852 and 1918 Congress authorized and made appropriations for seventeen surveys and projects covering all portions of the river, and during the same period ten such projects were authorized upon the tributaries. In 1918 Congress authorized the construction of Wilson Dam, providing a nine-foot slack water development over the Muscle Shoals rapids.

Pursuant to congressional authorization, a comprehensive survey of the Tennessee River and its tributaries with respect to navigation, flood control, and power development was undertaken by the Corps of Engineers of the War Department and completed on March 24, 1930. This report is contained in House Document No. 328, 71st Congress, 2d Session. The recommendations contained in this report were adopted by Congress in the Rivers and Harbors Act of 1930.

In its unimproved condition the Tennessee River is unsatisfactory for commercial navigation due to the following factors: (1) the extreme variations in stream flow between the summer and winter seasons; (2) the numerous natural obstructions, consisting principally of shoals and bars; (3) the steep slope and swift current.

During the past forty-five years, despite these obstacles, there has been considerable traffic upon the Tennessee River, increasing from one-half million tons in 1891 to a maximum of over two million tons in 1930. There is at the present time a large amount of potential through traffic which could be economically carried by water if the Ten-

nessee River were satisfactorily improved. A nine-foot minimum channel throughout the length of the river will permit continuous navigation through the Ohio and Mississippi Rivers without changing type of vessel, transshipment, or method of loading. The only feasible method [fol. 184] of obtaining an adequate navigation channel throughout the entire length of the Tennessee River is by means of a canalized development. This result cannot be obtained by open channel improvements. This channel could be obtained either by the construction of a series of thirty-two low lift dams or by the construction of seven high dams of the type authorized by the Tennessee Valley Authority Act. The United States Army Engineers have recognized the superiority of the high dam plan and originally recommended the construction of the alternative low dams upon the sole ground of economy, and have pointed out the advisability of adopting the high dam plan if some means could be devised for obtaining repayment of the excess cost by the sale of power created at such dams. Prior to the passage of the Tennessee Valley Authority Act the United States Army Engineers had in fact completed plans for a high dam at the site of the present Wheeler Dam and had started construction of the lock. Wherever the necessary funds can be obtained, the Army Engineers are now consistently replacing low dams with high dams because of the recognized superiority of the latter as navigation facilities. The high dams authorized by the Act will provide navigation facilities far superior to those that would be provided by the alternative low dam system due to the following factors: (1) a substantial saving in lockage time in a trip over the entire length of the river; (2) a substantial saving in the cost of operation and maintenance; (3) the improvement of navigation facilities upon the various tributaries and the reduction of the costs of future improvements; (4) the elimination of fluctuating pool levels and a consequent saving in the cost of operating and maintaining terminal facilities; (5) the elimination of high velocities, which impede upstream traffic; (6) an annual saving in dredging costs resulting from the reduction of silting; (7) the elimination of the necessity for breaking tows; [fol. 185] (8) wider channels resulting from high dams.

At the time of the passage of the Tennessee Valley Authority Act there was general recognition of the serious flood problem upon the Tennessee River and its tributaries,

involving the constant threat of interference with interstate traffic and the mails, not only upon the rivers themselves but upon the highways and railroads within the region. The interrelation of the problem of flood control upon the Tennessee and its tributaries with that of flood control upon the lower Mississippi was also recognized.

Floods have occurred frequently on the Tennessee River and its tributaries, many of which have been of great magnitude. It is probable that some floods of the future will be of much greater severity than any past flood of record. Such floods have in the past caused and, unless controlled, in the future will cause great damage to means and instrumentalities of interstate commerce and the mails and directly interrupt and impair communications and the flow of commerce on the Tennessee River and its navigable tributaries and on railroads and highways within the Tennessee River drainage basin. The construction of reservoirs in the Tennessee River and its main tributaries is necessary to afford adequate protection against such flood damage.

Floods have occurred frequently on the Mississippi River, particularly on the lower Mississippi between Cairo at the junction of the Ohio and Mississippi Rivers and the Gulf of Mexico. Many of these floods have been of great magnitude; probably floods of the future may be of even greater severity than any past flood of record. Such floods have in the past and, unless controlled, will cause great damage to means and instrumentalities of interstate commerce and the mails and directly interrupt and impair communications [fol 186] and the flow of commerce in the Mississippi River and its navigable tributaries and on railroads and highways within the Mississippi River drainage basin. The construction of reservoirs in the tributaries of the Mississippi River, including the Tennessee River and its tributaries, is necessary to afford adequate protection against such flood damage. The Mississippi River Commission and the Chief of Engineers of the United States Army, in House Document No. 259, 74th Congress, 1st Session, 1935, recommended the construction of reservoirs in the tributaries of the Mississippi River for the control of destructive floods in the Mississippi River basin.

The defendants allege that in addition to providing the nine-foot navigation channel throughout the length of the Tennessee River and improving navigation facilities upon

the tributaries, the various dams authorized by the Act and now under construction will materially reduce the hazard of destructive floods, both in the Tennessee Valley and upon the lower Mississippi. Dams of this type are the only ones that will provide such flood control benefits, as low dams have no flood control value.

The said Act directs that the operation of all dams intrusted to the Authority be primarily for the purposes of navigation and flood control. Insofar as is consistent with said requirements, the Act also authorizes the conversion into electricity of water power necessarily created by said dams and the transmission and sale of the surplus thereof. Pursuant to the authority of said Act, the defendant Tennessee Valley Authority has proceeded in an effort to dispose of said surplus energy according to the terms of said Act.

[fol. 187]

14

The defendants deny the material allegations of fact contained in Section XIV of said bill of complaint, except that they admit the allegations of the first paragraph.

15

The defendants deny the material allegations of fact contained in Section XVth of said bill of complaint and, for further answer, say:

The defendants allege that said Tennessee Valley Authority Act provides for the construction of certain dams and reservoirs in the Tennessee River and certain of its tributaries, designed and to be operated to improve navigation and control destructive flood waters in the Tennessee and Mississippi River systems. Pursuant to the provisions of the said Act and authorization from the Congress, the defendant Tennessee Valley Authority is now engaged in the construction of four dams upon the main stream of the Tennessee River to improve navigation and control destructive flood waters in the Tennessee River and its tributaries and in the Mississippi River, namely, Wheeler Dam, near Decatur, Alabama; Pickwick Landing Dam, in the State of Tennessee; Gunter'sville Dam, near Gunter'sville, Alabama; and Chickamunga Dam, near Chattanooga, Tennessee. The Tennessee Valley Authority has recommended to the Congress that in the near future three additional dams should

be constructed upon the main stream of the Tennessee River, one to be located at or near Gilbertsville on the lower part of the Tennessee in the State of Kentucky, another at White Creek, or Watts Bar, on the upper part of the Tennessee above Chattanooga in the State of Tennessee, and a third at Coulter Shoals on the upper part of the Tennessee between Chattanooga and Knoxville in the State of Tennessee.

[fol. 188] Pursuant to the provisions of the said Act and authorization from the Congress, the defendant Tennessee Valley Authority has also constructed the Norris Dam upon the Clinch River, one of the major tributaries of the Tennessee River, which dam is designed for and has been, is being, and will continue to be operated to improve navigation and control destructive flood waters in the Tennessee, Clinch, and Mississippi Rivers. It regulates and will regulate such a large part of the run-off of the watershed above it as to substantially improve such navigation and control such flood waters in the said rivers. Pursuant to such provisions and authority, the construction of the Hiwassee Dam (sometimes called "Fowler Bend Dam" in the bill of complaint) on the Hiwassee River, a main tributary of the Tennessee, has been commenced and will be carried forward. This dam is designed and will be operated to improve navigation and control destructive flood waters in the Tennessee, Hiwassee, and Mississippi Rivers. It will regulate such a large part of the run-off of the watershed above it as to substantially improve such navigation and control such flood waters in the said rivers. If Congress should in the future appropriate the necessary funds, the aforesaid dams, when completed, in conjunction with those already existing (including the Hales Bar Dam of the complainant Tennessee Electric Power Company, and the raising of the Hales Bar Pool as described in subdivision (13) of Section 17 hereof) and those under construction upon the main streams of the Tennessee, will provide a nine-foot navigation channel, and provide an adequate supply of water therefor, for a distance of approximately 652 miles from Knoxville, Tennessee, to the mouth of the Tennessee River near Paducah, Kentucky.

Defendants further allege that each of the said dams hereinabove mentioned is authorized by the terms of the [fol. 189] Tennessee Valley Authority Act of 1933 as amended that each of them will substantially improve navigation and reduce destructive floods in the Tennessee and

Mississippi River systems and provide valuable facilities for the national defense. Defendants further allege that dams such as Wheeler, Pickwick, Gunter'sville, Chickamauga, Gilbertsville, Watts Bar and Coulter Shoals on the main stream of the Tennessee River, and dams such as Norris and Hiwassee on the tributaries are the only type of dams that would accomplish all of these purposes.

The defendants further allege that apart from the dams hereinabove referred to as constructed under construction or recommended, there is no intention to construct or recommend the construction in the predictable or reasonably near future of any other dams upon the Tennessee River and its tributaries. The Authority has constructed and recommended for construction only such dams as are necessary for the improvement of navigation and control of destructive floods on the Tennessee and Mississippi River systems. There never has been, and there is not now, any prospect that such dams would be constructed by any of the complainants or any party other than the Federal Government, or that any one interested primarily in the generation of power would construct such navigation and flood control dams at the locations and according to the designs, sequence of construction, and method of operation as has been done and is intended to be done by the Authority. There are numerous sites upon the Tennessee River system which are valuable for the development of power, but dams constructed at such sites would not contribute substantially to the improvement of navigation or the control of destructive floods, although their construction would be more feasible for the development of power than any of the dams constructed, under construction, or recommended for construction by the Authority; but the Authority has not constructed or recommended for construction and has no intention and no authority under the Tennessee Valley Authority Act to construct such dams.

The dams constructed, under construction, and operated by the Tennessee Valley Authority, and their operation for improving navigation and controlling floods, have and will inevitably create property in the form of water power. The Tennessee Valley Authority Act authorizes the generation of electric energy at the said dams in so far as it is necessary to convert the said water power into electric energy in order to dispose of the said property of the United States which would otherwise go to waste and in order to

obtain revenue to reimburse the Government for the cost of the navigation and flood control facilities. Pursuant to the said Act, one generator has been installed and a second will be installed in the spring of 1937 at Wheeler Dam, and two generators have been authorized for installation at Pickwick Landing Dam in 1938, for the conversion of water power into electric energy. Pursuant to said Act, provision is also being made for the conversion of water power into electric energy at Norris Dam by the installation of two generators of 50,000 kw. capacity at said dam, but no firm or continuous power will be produced by such generators for the reason that during several months of the year it will be necessary, under the mandate of the said Act, to close down the power plant and store water in the Norris Reservoir for flood control and low water regulation for navigation. Only during those periods of the year when water is being released from said reservoir will electric energy be generated at said dam. Additional generators will not be installed at any of the dams except as it is determined from time to time that market demand will make possible the disposition of water power, and except as appropriations permit. [fol. 191] It is true that by the terms of the Tennessee Valley Authority Act the steam electric generating plant located at Sheffield, Alabama, near Wilson Dam, was turned over to the defendant Tennessee Valley Authority. But the defendants allege that the said steam electric generating plant has not been and is not being operated and that there is no plan or intention to operate said plant now or in the future, or to construct or operate any other steam electric generating plants. The said plant is merely held by the defendant Tennessee Valley Authority as an emergency stand-by plant for national defense purposes in connection with the munitions plants located near Muscle Shoals, Alabama.

The defendant Tennessee Valley Authority has disposed of and will dispose of only such electric energy as is generated from water power inevitably created by the operation of the said dams for navigation and flood control and which is not needed for governmental purposes and which would otherwise be wasted. The Tennessee Valley Authority Act authorizes the Authority to sell such surplus power at wholesale to public and private agencies within reasonable transmission distance from the dams under the control give preference to public agencies in accordance with the

of the Tennessee Valley Authority. By the mandate of the said Act, the Tennessee Valley Authority is directed to long-established government policy of giving preference to public agencies in the sale of power and other public property. But defendants deny that they have promoted public ownership for the distribution of electric energy. The defendants deny that they have incited municipalities, or any other customers of the complainants, or any of them, to breach existing contracts with the complainants or to purchase their power requirements from the defendant Tennessee Valley Authority. The defendants allege that on the contrary there has existed in most of the communities involved, for many years prior to the creation of the defendant Tennessee Valley Authority, organized movements for the public ownership and operation of electric distribution systems. The defendants allege that in every instance of applications for service received by the Tennessee Valley Authority from the communities within the area, such applications have been made upon the initiative of the communities involved, without solicitation or incitation upon the part of the defendants.

Defendants allege that the Tennessee Valley Authority Act authorizes the construction and acquisition of transmission lines by the Tennessee Valley Authority in order to reach a market for the surplus electric energy which it generates and in order to avoid a monopoly by private agencies of government-owned power. Congress expressly recognized the long-existent private monopoly of the government-owned power at Wilson Dam. The same monopolistic situation would exist at the other dams now under construction or recommended for construction by the Authority if the sale of the surplus power should be limited to sales at the dam site. Congress authorized the acquisition of transmission lines in order to avoid such a monopoly and to effect a wide distribution of government-owned power at the various dams intrusted to the Authority. The said Act also authorizes the Tennessee Valley Authority to construct, acquire, and operate rural transmission lines for the purpose of disposing of said surplus electric energy direct to individual customers located on farms and in small villages.

The defendants allege that in the construction and acquisition of transmission lines by the Tennessee Valley Authority they have no purpose except to carry out the

provisions of the said Act to provide the necessary means for disposing of the surplus electric energy which is being generated at the government-owned dams. The defendants [fol. 193] allege that from the beginning of operations by the Tennessee Valley Authority, they have attempted wherever possible to prevent duplication of existing transmission and distribution facilities. This policy is expressly recognized in the Act. The Authority is attempting to dispose of its surplus power by satisfying increased demand for electric power and by satisfying demand for power in areas heretofore unserved. The Tennessee Valley Authority has refrained from constructing competing or duplicating transmission lines in every instance where a reasonable possibility of acquiring existing facilities presented itself. Defendants have suggested to the municipalities that have expressed a determination to exercise their legal rights to own and operate their own electric distribution systems that they avoid duplication and competition by attempting to acquire existing facilities wherever possible.

Defendants deny the allegations of the bill of complaint as to a so-called "yardstick". Defendants further deny that any regulation of complainants is the governing purpose of the defendants, or that the Authority regulates or endeavors to regulate the business of complainants in any way, or that it is authorized by the Act so to do. The defendants deny that they have ever solicited or endeavored to solicit or induce any person or public or private corporation to purchase electricity from the Authority or to make such purchase in order to affect or influence the rates of complainants in any way, but that, in every instance, as hereinbefore alleged, the application for the purchase of electric energy from the Authority has been made on the initiative of the applicant. The defendants deny that the Tennessee Valley Authority has ever granted or denied or ever intends to grant or deny any application for a contract for the purchase of power in order to influence or affect in any way the rates of complainants or out of regard for the [fol. 194] level of such rates. The defendants further say that, farm from endeavoring to execute contracts for the sale of power in order to regulate or in any way influence the rates of complainants, the Authority has in fact made many contracts for the sale of power to municipalities which had theretofore maintained and operated their own elec-

tric generating facilities and which were not served by any of the complainants or any privately-owned utility, and the Authority has made many contracts for the sale of power in rural areas and small villages which had not theretofore received electric service of any character and which the complainants manifested no interest in serving. The defendants deny that the Tennessee Valley Authority has refused to sell electric energy to the complainants except as a temporary expedient. The defendants allege that, on the contrary, the Authority, under the contract of January 4, 1934, contracted to dispose of surplus power to the subsidiary companies of the Commonwealth and Southern system, each of which is a complainant in this cause, and expressly undertook to reserve a minimum of 20,000 kw. of firm power for the said complainants, that said complainants have purchased and are still purchasing most of the power that has been and is being disposed of by the Authority, and that an average of 82,428,000 kwh. per month for the past four months ending October 31, 1936, at a total consideration for said period of \$452,102, has been and is being disposed of in large amounts to said complainants and accepted by them to their benefit. The total power purchased from the Tennessee Valley Authority by the Commonwealth and Southern system since January 4, 1934, has amounted to approximately 775,853,935 kwh. at a total consideration of \$1,544,302 through October 31, 1936.

Defendants allege, with respect to the real character of the so-called "yardstick," that the Tennessee Valley [fol. 195] Authority has endeavored to conduct its operations in an efficient and businesslike manner and to keep a full and public accounting of costs, and that it plans to make this information generally available to all having a proper interest. This is expressly embodied in Section 14 of the Tennessee Valley Authority Act. This section provides for accumulating accurate cost data, maintaining a uniform system of accounting, and keeping such other records as may be helpful in determining the actual cost and value of service, etc. The Authority is required to report this information from time to time to Congress and also make it available to the Federal Power Commission and other federal and state agencies. The nature of the so-called "yardstick" is clearly defined by this section of the statute and has always been so understood. The so-called "yardstick" is only a matter of accounting coupled with

publication of the information obtained. It does not have the effect of law. It is not expressed in terms of law. It does not purport to be law. It imposes no duty. It prescribes no regulation or penalty. Its function is educational, and at most advisory.

Defendants allege that the "power policy" of the Authority, as announced on August 25, 1933, was not effectuated and it was formally rescinded by Board Resolution on October 5, 1935. If deemed material, defendants deny that said "power policy" was adopted for the purposes alleged in the bill of complaint, and allege that all acts performed by the Authority before and since that statement was announced have been in accordance with the terms and pursuant to the declared purposes of the Tennessee Valley Authority Act, and that the Authority has no power policy other than that provided in the Tennessee Valley Authority Act.

The defendants deny that they, or any of them, have any intent or purpose, or have adopted any plan or program, [fol. 196] to injure the complainants, or any of them, or to accomplish the objects alleged in the bill. The defendants allege, upon the contrary, that every act performed by them has been governed by the terms of the Act by which the defendant Tennessee Valley Authority was created. The defendants deny that they have entered into any conspiracy or unlawful plan or program, or any plan or program, with Harold L. Ickes.

16

The defendants deny the material allegations of fact contained in Section XVI of said bill of complaint, and for further answer the defendants allege that since 1932 there has been a substantia¹ increase annually in the demand for electric power in the Tennessee Valley area; that there has been no corresponding increase in the generating capacity of the complainants in this area; that from 1929 to the present the relative increase of production of electricity has far exceeded the increase in plant capacity, including additions to generating capacity which have resulted from activities of the Tennessee Valley Authority; that in absence of increases in generating capacity in the area resulting from activities of the Tennessee Valley Authority, there would be no surplus generating capacity in 1937 but a substantial shortage which would rapidly in-

crease from the year 1937 on if the present trend of increasing power consumption in the area does not substantially vary; that certain of the complainants, and more particularly the subsidiaries of the Commonwealth and Southern Corporation, including the Alabama Power Company, the Tennessee Electric Power Company, the Mississippi Power Company, and the Georgia Power Company, have purchased substantial blocks of power from Wilson Dam previous to the passage of the Tennessee Valley [fol. 197] Authority Act, and since the passage of that Act up to the present, as hereinbefore set out; that since the passage of the Act these purchases were equal to ten per centum of the total sales to ultimate customers by the Alabama Power Company, the Georgia Power Company, and the Tennessee Electric Power Company combined; that during the late summer and fall, power companies, including some of the complainants in the Commonwealth and Southern system, drew upon all available surplus capacity of power plants operated by the defendant Authority at Wilson and Norris Dams, the latter having just been completed and put into operation; that contemporaneous with activities of the Tennessee Valley Authority since 1933 the power companies operating in the Tennessee Valley, including those complainants in close proximity to the Authority, have without exception shown substantial increases in the number of customers served and in total sales to ultimate consumers during 1934 and 1935 and, on information and belief, will show substantial increases for the year 1936; that these increases have far exceeded the average annual increase for the United States as a whole; and that power requirements in the Tennessee Valley have been steadily growing in the years since the passage of the Tennessee Valley Authority Act and have reached a point where they are absorbing practically all of the generating capacity in the region; that defendants are informed and believe that there has already developed an ample market for the electricity presently made available at the dams of the Tennessee Valley Authority without reduction in the sales and income of the plaintiff companies; that the present acts of the Tennessee Valley Authority and those in the predictable future will not destroy any of the business and property of the complainants; that the Authority has no

intention to install generating capacity except as the market demands such installations; and that the alleged threatened damage to complainants is wholly remote and speculative.

[fol. 198]

17

Answering the allegations of Section XVII of said bill of complaint, the defendants say:

(1) The defendants admit that the use, control, and possession of Wilson Dam and the other Government properties located at Muscle Shoals, Alabama, including the nitrate plants and the Sheffield Steam Plant, have been delivered to the Tennessee Valley Authority under the terms of the Tennessee Valley Authority Act, but defendants deny that they intend to use or operate the said steam plant except to the extent described in Section 15 hereof.

(2) The defendants admit that, pursuant to authority vested in the Tennessee Valley Authority by said Act, the Authority has constructed Norris Dam upon the Clinch River, one of the main tributaries of the Tennessee River, for the purposes heretofore set forth. The defendants allege that the construction of said Norris Dam and the operation of the reservoir in accordance with the provisions of the said Act will increase and has already increased substantially the minimum navigable depths upon the Tennessee and Mississippi Rivers and will control and has already controlled substantially the water level on such rivers, and that the increase and control has been, is, and will be of substantial benefit to commercial navigation. The defendants further allege that the Norris Reservoir will provide a minimum navigable depth of six feet from the damsite 38 miles up the Powell River and 55 miles up the Clinch River. Before the passage of the Tennessee Valley Authority Act, the United States Army Engineers had started the formulation of plans for the construction of a dam known as Cove Creek Dam at the site where Norris Dam is located. The Norris Dam has been constructed insofar as navigation facilities [fol. 199] are concerned in substantial conformity with the previous plan and design of the United States Army Engineers. The defendants further allege that the Norris Dam Reservoir provides a total of approximately 2,900,000 acre feet of storage, which is sufficient for control of the runoff above the dam. The Clinch and Powell Rivers contribute

materially to the extreme flood peaks in the Tennessee, and flood control at this point is particularly important. The storage provided by this reservoir will be especially valuable during storms that produce maximum flood conditions in the upper Tennessee River and will contribute substantially to the control of floods upon the lower Mississippi. The operation of this dam as provided by the Act has improved and will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers. As estimated in House Document No. 328, the Cove Creek Dam as planned by the United States Army Engineers would have decreased the flood crest on the Tennessee River at Chattanooga in the flood of 1926 by over five feet. The normal operation of Norris Dam as actually constructed, based upon these estimates, would have decreased the flood crest at Chattanooga in the flood of 1886 by over eleven feet and in the flood of 1917 by over six feet. The defendants further allege that during the past flood season, the operation of the Norris Dam for flood control, as provided by the Act, resulted in such a decrease in the flood crest at Chattanooga as to prevent a serious flood condition at that point. The defendants further allege that during the past summer when navigation upon the lower Tennessee and Mississippi Rivers was seriously handicapped by low water, the operation of the Norris Reservoir, as provided by the Act, increased the navigable depths below to such an extent that it was possible to continue navigation which would otherwise have been left stranded. The defendants further allege that [fol. 200] the construction of Norris Dam and the operation of the Norris Reservoir in the manner prescribed by the Act will result and has resulted in a material improvement in the Government property at Wilson Dam by increasing the amount of firm power there available, and will provide and has provided a valuable facility for national defense.

(3) The defendants admit that pursuant to the provisions of the said Act and authorization from the Congress, the Tennessee Valley Authority is proceeding with the construction of the Wheeler Dam upon the Tennessee River for the purposes heretofore set forth. The defendants allege that the construction of a dam or a series of dams at the site of the present Wheeler Dam has been considered by the United States Army Engineers and by Congress since 1914. At the time of the passage of the Tennessee Valley Authority

Act, the United States Army Engineers had completed their plans for a high dam at this site and had started the construction of the navigation lock therefor, which has been utilized by the Authority as a part of Wheeler Dam. As a result of the construction and operation of this dam in accordance with the provisions of the Act, the nine-foot navigable channel will be extended upstream for a distance of approximately 74 miles to the site of the Guntersville Dam, and a nine-foot navigable depth will be provided upon the Elk River, one of the tributaries of the Tennessee, for a distance of approximately 30 miles. Provision has been made in this dam for substantial flood storage. The construction and operation of Wheeler Dam as provided by the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(4) The defendants admit that pursuant to the provisions of the said Act and authorization from the Congress, the Tennessee Valley Authority is proceeding with the construction of the Pickwick Landing Dam upon the Tennessee River [fol. 201] for the purposes heretofore set forth. The defendants further allege that the construction and operation of Pickwick Landing Dam in accordance with the provisions of the Act will complete the nine-foot navigable channel upon the Tennessee River between Pickwick Landing Dam and Wilson Dam, a distance of approximately 53 miles. It has been recognized by the United States Army Engineers and Congress for many years prior to the passage of the Tennessee Valley Authority Act that the most necessary and desirable improvement upon the Tennessee River at the present time is that which will result from the completion of Wheeler and Pickwick Dams, since these two dams together, when operated as provided by the Act, will provide a navigable channel over that important section of the river between Pickwick Landing and Guntersville, a distance of approximately 127 miles. The construction and operation of Pickwick Dam in accordance with the provisions of the Act will extend the navigable channel back to the Wilson Dam pool, will overcome the very serious rapids and bars in that section of the river, and will make unnecessary the use of the existing Riverton Lock and Colbert Shoals Canal, which are wholly inadequate navigation facilities. Provision has been made in this dam for substantial flood storage.

The construction and operation of Pickwick Landing Dam as provided by the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(5) The defendants admit that pursuant to the provisions of the said Act and authorization from the Congress, the Tennessee Valley Authority is proceeding with the construction of the Guntersville Dam upon the Tennessee River near Guntersville, Alabama, for the purposes heretofore set forth. The construction and operation of Guntersville Dam in accordance with the provisions of the Act will provide the required nine-foot channel up to the existing Hales Bar [fol. 202] Dam, a distance of approximately 82 miles. The existing Widows Bar Lock and Dam, which lie in the upper section of the Guntersville pool and which are entirely inadequate for present and future navigation requirements, will be completely submerged and replaced by the Guntersville Dam facilities. The construction and operation of Pickwick Landing, Wheeler and Guntersville Dams as provided by the Act will result in extending the nine-foot channel from Pickwick Landing to the City of Chattanooga, a distance of approximately 257 miles. Provision is being made in this dam for substantial flood storage. The construction and operation of Guntersville Dam as provided by the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(6) The defendants admit that pursuant to the provisions of the said Act and authorization from the Congress, the Tennessee Valley Authority is proceeding with the construction of the Chickamauga Dam upon the Tennessee River near Chattanooga, Tennessee, for the purposes heretofore set forth. As a result of the construction and operation of this dam in accordance with the provisions of the Act, the nine-foot channel will be extended to the proposed site of the White Creek or Watts Bar Dam, a distance of 59 miles. This dam will also provide a nine-foot depth upon the Hiwassee River to the vicinity of Charleston, Tennessee. Provision is being made in this dam for substantial flood storage. The construction and operation of Chickamauga Dam as provided by the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(7) The defendants admit that the Tennessee Valley Authority has recommended to the proper committees of Congress that appropriations should be made in the future for the construction of Watts Bar Dam upon the Tennessee River for the purposes heretofore set forth. The defendants [fol. 203] further allege that the construction and operation of the Watts Bar Dam (previously known as the White Creek Dam) in accordance with the provisions of the Tennessee Valley Authority Act will continue the nine-foot navigable channel from the head of the Chickamauga pool to the proposed Coulter Shoals project, a distance of approximately 74 miles. This dam will also provide a nine-foot channel upon the Clinch River for a distance of about 25 miles and upon the Emory River for a distance of 12 miles above the junction of the Emory and Clinch Rivers. Provision will be made in this dam for substantial flood storage. The construction and operation of Watts Bar Dam in accordance with the provisions of the Tennessee Valley Authority Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(8) The defendants admit that the Tennessee Valley Authority has recommended to the proper committees of Congress the construction of Gilbertsville Dam upon the Tennessee River for the purposes heretofore set forth. The defendants have also recommended that appropriations should be made for exploratory work to investigate the site of this proposed dam. The construction and operation of the dam at the Gilbertsville site, (this dam was previously known as Aurora), in accordance with the provisions of the Tennessee Valley Authority Act will extend the nine-foot channel a distance of 184 miles to the site of Pickwick Landing Dam. Provision will be made in this dam for substantial flood storage. The construction and operation of Gilbertsville Dam in accordance with the provisions of the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(9) The defendants admit that the Tennessee Valley Authority has recommended to the proper committees of Congress that appropriations should be made in the future [fol. 204] for the construction of Coulter Shoals Dam upon the Tennessee River for the purposes heretofore set forth. The construction and operation of this dam in accordance

with the provisions of the Tennessee Valley Authority Act will extend the nine-foot channel from the Watts Bar pool for a distance of about 44 miles to a point above Knoxville, Tennessee. Provision will be made in this dam for substantial flood storage. The construction and operation of the Coulter Shoals Dam in accordance with the provisions of the Act will substantially improve navigation and control destructive flood waters in the Tennessee and Mississippi Rivers.

(10) The defendants admit that appropriations have been made by Congress for the beginning of construction of the Hiwassee Dam (sometimes referred to in the bill of complaint as the Fowler Bend Dam) upon the Hiwassee River, one of the main tributaries of the Tennessee River, for the purposes heretofore set forth. The construction and operation of this dam in accordance with the provisions of the Act will result in substantial improvement in navigation in the Tennessee, Hiwassee, and Mississippi Rivers. As presently planned, this reservoir will provide a storage capacity of approximately 440,000 acre feet, which is sufficient for control of the run-off from above the dam. The Hiwassee contributes materially to the extreme flood peaks on the Tennessee, and flood control at this point is particularly important. The storage provided by this reservoir will be especially valuable during storms that produce maximum flood conditions in the upper Tennessee River and will contribute substantially to the control of floods upon the lower Mississippi.

(11) The defendants admit that the Tennessee Valley Authority recommended to the proper committees of Congress appropriations for the construction of the Fontana Dam upon the Little Tennessee River, one of the main [fol. 205] tributaries of the Tennessee River, but state that no such appropriation has been made and that there is no intention of constructing said dam at any time within the predictable future.

(12) The defendants admit that the Tennessee Valley Authority has recommended to the Congress that an increase should be made in the height of Wilson Dam by the Government to improve said dam as a navigation, flood control, and national defense facility.

(13) The defendants admit that the Tennessee Valley Authority has recommended to the Congress that the Hales Bar Dam pool level should be raised. An increase in the height of such pool level is essential to the completion of the nine-foot channel. Defendants recommended to the Congress that the necessary raising of the pool level should be accomplished by constructing a low navigation dam in the vicinity of Chattanooga and suggested in the alternative that the same result might be accomplished by increasing the height of the Hales Bar Dam, if that should prove feasible.

(14) The defendants admit that provision of emplacements for the possible future installation of electric generating equipment is being made in the design of all dams constructed or under construction by the Tennessee Valley Authority. These emplacements will permit, but do not include, the installation of generators. No such installation of generators has been made, nor is there any intention to make such installation, except as set forth in Section 15 hereof. Construction of dams without such emplacements would preclude the later installation of generators. Such provision for emplacements is therefore necessary to avoid waste of water power when a demand arises for such power.

(15) The defendants deny the accuracy of the assumptions and computations upon which the allegations of subsection [fol. 206] (15) of Section XVII of said bill of complaint depend. The defendants further allege that the Tennessee Valley Authority has not operated and is not operating and has no intention of operating the said Sheffield Steam Plant for the production of power.

(16) The defendants admit that certain dams in process of construction, when operated for navigation and flood control by avoiding the high and low extremes in the flow of waters, will inevitably make dependable a greater amount of power at Wilson Dam, but the defendants allege that the exact amount of such increase depends upon assumptions and computations, and defendants deny the accuracy of the assumptions and computations upon which are based the allegations of the bill of complaint in this respect.

For further answer the defendants allege that the present dependable capacity of the Wilson Dam is 108,000 kw. firm at 60% load factor, such load factor being substantially in excess of the present or reasonably prospective load factor

of the Authority except for power requirements of complainant power companies. Defendants further allege that the present demand of existing customers of the defendant Tennessee Valley Authority, except complainant power companies, is 25,000 kw., being substantially less than the firm capacity of Wilson Dam; that the reasonably prospective demand of the said customers of the Authority within the predictable future is greatly less than the capacity of Wilson Dam as long existent and as it now exists; that the present demand of the present customers of the defendant Tennessee Valley Authority, plus the reasonably prospective demand of the present customers of the Authority, plus the reasonably prospective demands of the next several years of all of the customers now under contract with the Authority but not presently served and assuming that each will actually be served, and except for the demands of the complainant power companies, is substantially less than the capacity [fol. 207] of Wilson Dam.

Defendants further allege that the following table represents substantially the available hydroelectric power at Wilson, Wheeler, Pickwick and Norris Dams at the various times and under the various conditions set out in the said table:

Firm Generating Capacity

	Present	Present	April 1, 1937	Sept. 1, 1938
	Wilson Dam	Wilson and Wheeler Dams (one generator at Wheeler)	Wilson and Wheeler Dams (two generators at Wheeler)	Wilson, Wheeler and Pickwick Dams (two Generators at Wheeler and Pickwick)
With stream flow regulation from existing dams for navigation and flood control	88,500 kw. of continuous power	127,500 kw. of continuous power	143,500 kw. of continuous power	202,000 kw. of continuous power
	108,000 kw. at 60% load factor	155,000 kw. at 60% load factor	187,000 kw. at 60% load factor	269,000 kw. at 60% load factor
With the above and the use of Norris Dam generators for auxiliary purposes	153,000 kw. of continuous power	185,000 kw. of continuous power	207,000 kw. of continuous power	268,000 kw. of continuous power
	190,000 kw. at 60% load factor	228,000 kw. at 60% load factor	258,000 kw. at 60% load factor	360,500 kw. at 60% load factor

[fol. 208] (17) The defendants admit that the territories served by the respective complainants are partially within 250 miles of one or more of the aforesaid dams, except that defendants deny that the Southern Tennessee Power Company has any operating territory within 250 miles of any of the aforesaid dams. The defendants further allege that the territories served by some of the complainants are not within 250 miles of each and every one of said dams; that, for example, the operating territory of the complainants Mississippi Power and Light Company and the Mississippi Power Company is not within 250 miles of Norris and Hiwassee Dams, now under construction, and Watts Bar and Coulter Shoals, recommended for construction; that the same is true of the West Tennessee Power and Light Company and the Memphis Power and Light Company; that, similarly, the operating territory of the complainants Kentucky and West Virginia Utilities Company, Appalachian Power Company, East Tennessee Power and Light Company, Tennessee Public Service Company, Carolina Power and Light Company, Kingsport Utilities Company, and Tennessee Eastern Electric Company and Holston River Electric Company are not within 250 miles of Pickwith Landing Dam, now under construction, and Gilbertsville Dam, recommended for construction; and that there are many similar instances.

(18) With respect to the construction schedule for dams recommended by the defendants, the recommendation itself is the best evidence and the defendants therefore attach hereto as Exhibit "A," and hereby make a part of this answer, the Report of March 31, 1936, to the Congress of the United States.

(19) Except as hereinafter specifically admitted, the defendants deny the material allegations of subdivision (19) of Section XVII of the said bill of complaint, relating to transmission and rural lines in the States of Mississippi, [fol. 209] Tennessee, Alabama, and Georgia. Defendants further say that the Tennessee Valley Authority has neither acquired nor constructed, nor has the Tennessee Valley Authority authorized the acquisition or construction of any transmission or rural lines in the territories of many of the complainants, including, for example, Franklin Power and Light Company, Southern Tennessee Power Company, Birmingham Electric Company, Appalachian Power Company,

Carolina Power and Light Company, Holston River Electric Company, Kentucky and West Virginia Power Company, Kingsport Utilities, Incorporated, East Tennessee Light and Power Company, and Tennessee Eastern Electric Company.

(20) The defendants admit that the Tennessee Valley Authority has constructed a transmission line from Wilson Dam to Norris Dam; that the Tennessee Valley Authority is constructing a transmission line from a point on said Wilson-Norris line located at or near White Creek to the site of the Chickamauga Dam, now under construction by the said Authority, which line is necessary for the purpose of supplying the power to construct said Chickamauga Dam. The defendants also admit that the Tennessee Valley Authority has authorized the construction of a transmission line from Pickwick Dam to the City of Memphis, Tennessee, and that it has authorized construction of a line which will extend from Wheeler Dam to the vicinity of the City of Columbia, Tennessee.

(21) The defendants deny the material allegations of subdivision (21) of Section XVII of the said bill of complaint.

(22) The defendants deny that the Tennessee Valley Authority has purchased or that there is any intention to purchase or that they have promoted or that there is any intention to promote the purchase of any retail distribution systems, franchises, contracts, or going business located in [fol. 210] the places named in said bill of complaint or in any other places, except such properties as were acquired under the contract of January 4, 1934, which was sustained by the Supreme Court in the *Ashwander* case. In some cases where municipalities, without solicitation or inducement by the Authority, have determined to acquire their own municipal electric systems, the Authority has suggested to such municipalities, for the sole purpose of avoiding duplication and any injury to any private power company then operating in such community, that they attempt to acquire the existing facilities.

(23) The defendants admit that the Tennessee Valley Authority has entered into contracts for the sale of electric energy to Knoxville, Tennessee; Memphis, Tennessee; Tupelo, Mississippi; Athens, Alabama; New Albany, Mississippi; Pulaski, Tennessee; Muscle Shoals, Alabama; Amory,

Mississippi; and Dickson, Tennessee; but the defendants deny that the Tennessee Valley Authority has entered into any such contracts with Bessemer or Tarrant City, Alabama. The defendants state that, while there are no contracts in existence with Alcorn County, Mississippi, Pontotoc County, Mississippi, or Prentiss County, Mississippi, there are existing contracts between the Tennessee Valley Authority and the Alcorn County Electric Power Association, the Pontotoc County Electric Power Association, and the Prentiss County Electric Power Association. Defendants deny that the Tennessee Valley Authority has made or authorized any contract with the Mississippi Electric Power Association. The defendants further state that as a part of the consideration for the said contract of January 4, 1934, the Alabama Power Company and the Mississippi Power Company agreed to the sale of power by Tennessee Valley Authority in the area served by the properties conveyed in north Alabama and Mississippi as described [fol. 211] in said contract, and transferred all franchises, contracts, privileges, and rights to do business relating to the use of said properties conveyed. Said contract also agreed to the sale of electricity by the Authority in various rural areas outside the said territory to purchasers who were not customers of the power companies, and to other non-customers outside said areas to a maximum load of 2500 kw. By extension agreement, dated October 7, 1936, this limit has been raised to 4000 kw. The defendants allege that the total sales by the Authority, either directly to rural customers or to the non-profit associations in the area served by these complainants, have not and will not exceed these contractual limits.

Defendants allege that the contracts the Tennessee Valley Authority has entered into for the sale of power, and more particularly those specified in the bill, vary substantially as to their terms. Defendants further allege that no complainant is operating in any city with which the Tennessee Valley Authority has a contract, except Knoxville and Memphis, Tennessee. Defendants further allege that aside from the areas served by the lines conveyed to the Authority by the Alabama Power Company under the contract of January 4, 1934, in every city with which the Authority has a contract, except Knoxville, Memphis and Jackson, Tennessee, the electric distribution systems were owned and

operated by the municipalities prior to the passage of the Tennessee Valley Authority Act. Defendants further allege that Tupelo, Athens, Amory, New Albany, and Muscle Shoals were located in territory in which complainants Alabama Power Company and Mississippi Power Company transferred their properties to the defendant Authority by the contract of January 4, and that none of these cities, except Tupelo and Athens, purchased power from any of com-[fol. 212] plainants before or after the passage of the Tennessee Valley Authority Act of 1933, but that each of them generated its own electric energy.

Defendants further allege that all the rural associations which are alleged by complainants to have contracted with the Tennessee Valley Authority are located within the territory in which the Mississippi Power Company sold all of its properties to the defendant Authority under the contract of January 4. Defendants allege that the complainant Georgia Power Company does not own or operate a distribution system in the City of Dalton, Georgia, and that the Tennessee Valley Authority has not made or authorized any contract with said city.

(24) As previously set out in this answer, the defendants deny the allegations with respect to a systematic campaign of propaganda, or any campaign of propaganda, in said subsection (24) of said Section XVII of the bill of complaint. The defendants allege that they have not conducted any plan or campaign directed against the complainants, and further state that they have not acted with any intent or purpose of injuring the complainants or any of them; and further allege that every act that has been performed by the Authority has been governed by the terms of the Act creating it. Defendants further say that such public addresses and radio addresses as may have been given by the individual defendants or other officers of the Tennessee Valley Authority, and such articles as may have been written by them, in each and every instance represent an expression of personal and unofficial opinion, not in the line of official business and without the approval or concurrence of the Board of Directors of the Tennessee Valley Authority. None of the acts of the individual directors complained of in the said bill represent any of the acts of the Tennessee Valley Authority, except as done by the directors acting as a Board [fol. 213] or as authorized by the Board.

(25) As previously set out in this answer, the defendants deny the allegations with respect to attempted coercion of the complainants and threatened duplication, and deny all other material allegations of fact contained in said subsection (25) of said Section XVII.

(26) The defendants admit that certain acts relating to certain aspects of the operations of the defendant Tennessee Valley Authority have been passed by the legislatures of the States of Alabama, Mississippi, and Tennessee, and allege that said acts show upon their face that said states have authorized the cities and other political subdivisions located within said states to perform certain acts that are complained of in the bill of complaint. Defendants further allege that such acts as have been enacted affecting the operations of the Tennessee Valley Authority in the various states differ in material respects in each state.

(27) The defendants admit that in order to carry on the work of the Tennessee Valley Authority it has been necessary to establish offices in certain localities in the area involved, but the defendants deny that such offices have been established for the purpose of disseminating propaganda, or with any purpose of injuring complainants, and allege that the offices have been established solely for the purposes of the Tennessee Valley Authority Act.

(28) The defendants admit that the Electric Home and Farm Authority, Inc., a Delaware corporation, was incorporated under an Executive Order of the President of the United States on December 19, 1933, and that the Directors of the defendant Tennessee Valley Authority were made the directors of said corporation. The defendants also admit that said corporation has been effectively dissolved and is no longer in existence and that on August 1, 1935, a new [fol. 214] corporation was incorporated under the laws of the District of Columbia; that said new corporation has no connection with any of the defendants; and that its directors are in no sense connected with the defendant Tennessee Valley Authority. However, defendants are informed and believe and therefore allege that certain of the complainants have had and continue to have business and contractual relations with the said Electric Home and Farm Authority, Inc.

(29) Defendants deny the material allegations of subsection (29) of said Section XVII of the bill of complaint and

say further that the allegations of this subsection are answered by the report itself, which it attached hereto as Exhibit "A."

(30) The defendants deny all of the material allegations of fact contained in subsection (30) of Section XVII of the bill of complaint. The defendant Tennessee Valley Authority has one contract to serve one customer of one of the complainants at the termination of the existing contract for service between said complainant and that customer. The contract with the Tennessee Valley Authority was made only after repeated requests by the said customer and without any solicitation or inducement whatever from the Tennessee Valley Authority. Except for this instance and except for customers served by transmission lines acquired under the contract of January 4, 1934, hereinabove referred to, being customers whom complainants operating in that territory agreed that the Authority should sell, the Authority is not serving and has no contract to serve a single customer of any of the complainants.

(31) Except as herein expressly admitted, the defendants deny all of the material allegations of fact contained in said Section XVII of said bill of complaint.

[fol. 215] The defendants further allege that so far as they are able to determine from the bill of complaint, the sole basis for a claim of actual or threatened injury on the part of seven of these complainants is the fact that they own certain properties located within a radius of 250 miles of some dam that may be constructed by the Tennessee Valley Authority. The defendants allege that the Authority is not now constructing and has not authorized the construction of any transmission line, has not sold nor authorized the sale of any electricity, and has not entered into or authorized any contracts for the sale of electricity in any part of the territory now served by the Franklin Power and Light Company, the Appalachian Electric Power Company, the Carolina Power and Light Company, the Holston River Electric Company, the Kingsport Utilities, Incorporated, the Kentucky and West Virginia Power Company, or the Tennessee Eastern Electric Company.

The defendants allege that another complainant, the Birmingham Electric Company, is engaged in business only in the City of Birmingham and adjoining territory, located in Jefferson County, Alabama, including the Cities of Tarrant

City and Bessemer, Alabama. The Authority has not made or authorized any contracts with any cities or other customers located within this territory. The Authority is not constructing and has not authorized the construction of any transmission line connecting its source of supply with this territory. As will more fully appear hereinafter, there is pending in the Supreme Court of the District of Columbia a suit filed by the Birmingham Electric Company to restrain the Cities of Tarrant City and Bessemer, the Tennessee Valley Authority and PWA from proceeding with plans to furnish electrical service to the residents of those cities in competition with the complainant and a temporary injunction [fol. 216] has been issued pending the final determination of the legality of loans by the PWA to municipalities for municipal power plants.

The defendants further allege that another complainant, the Memphis Power and Light Company, is engaged in business only in the City of Memphis and the adjoining territory, all located in Shelby County, Tennessee. The defendants allege that although the Authority is constructing a transmission line which will reach Memphis when completed, not earlier than ten months from the date hereof, there is no existing transmission line connecting the City of Memphis with any dam or other source of power under the control of the Authority and that the City of Memphis does not own a distribution system with which it could compete if it so desired with the present system owned by the Memphis Power and Light Company. As will appear hereinafter, the suits already pending in the Supreme Court of the District of Columbia and in the state courts of Tennessee afford full protection to this complainant from any immediate threat of injury arising out of the alleged acts set out in the bill of complaint.

The defendants further allege that another of the complainants, the Tennessee Public Service Company, is engaged in business only in the City of Knoxville and adjoining rural territory; that there is no existing or authorized transmission line from the City of Knoxville to any dam or other source of power under the control of the Authority, and that the City of Knoxville does not own any distribution system which it could operate in competition with the Tennessee Public Service Company. As will more

fully appear hereinafter, this complainant is fully protected from any immediate threat of injury from the alleged acts set out in the bill of complaint by the suits that are now pending in the Supreme Court of the District of [fol. 217] Columbia and the state courts of Tennessee.

Defendants further allege that the complainant Georgia Power Company is not entitled in this case to be protected from any alleged threats of injury from the alleged acts set out in the bill of complaint since said acts are the subject matter of an action now pending in the United States District Court for the Northern District of Georgia, which is styled Georgia Power Company v. Tennessee Valley Authority, et al. In this suit, the complainant Georgia Power Company sought to enjoin the construction of transmission lines, the sale of power, and the execution of contracts in northern Georgia (the acts complained of in the instant bill) upon substantially the same grounds as those set forth in the present bill. The complainant's application for a temporary injunction was denied after a hearing upon the ground that said acts of the Tennessee Valley Authority were valid, and the case, after having been set for trial, was continued at the request of the Georgia Power Company. Defendants further allege that the extension of the contract of January 4 with the Commonwealth and Southern companies hereinbefore referred to, which includes the Georgia Power Company, affords additional protection to this complainant from any danger of the loss of customers now served by it.

The defendants further allege that the complainant Southern Tennessee Power Company is engaged in business only as a transmission company transmitting electric energy from the Wilson Dam to the Alabama-Tennessee state line, thereby connecting Wilson Dam with the transmission system of the Tennessee Electric Power Company. This transmission line, owned by this complainant, is leased to the Tennessee Electric Power Company. The bill does not allege any acts of the Authority which may injuriously affect the use of this line. The defendants allege that 40% [fol. 218] of the total power used by the Tennessee Electric Power Company for the months of June and July, 1936, was generated at Wilson Dam and transferred to said Company over this line, and the Tennessee Electric Power Company has, in fact, enjoyed a continually increasing and more

profitable business during the period since the passage of the Tennessee Valley Authority Act.

The allegations of the bill regarding acts of the Tennessee Valley Authority in the claimed territories of the Alabama Power Company, Mississippi Power Company and Tennessee Electric Power Company are answered in subsection (23) above.

With respect to complainants Mississippi Power and Light Company, West Tennessee Power and Light Company, East Tennessee Power and Light Company, and Kentucky-Tennessee Light and Power Company, the defendants allege that the bill of complaint does not allege that the Authority has entered into or authorized any contracts for the sale of power in the areas claimed to be served by said complainants.

18

Except as expressly admitted in this answer, the defendants deny the material allegations contained in Section XVIII of said bill of complaint.

19

Except as expressly admitted in this answer, the defendants deny the material allegations of fact contained in Section XIX of said bill of complaint except that the defendants admit that the telegram from Harold L. Ickes to Lee Glenn, Mayor of Florence, Alabama, quoted in said Section XIX, was sent.

For further answer defendants deny that they have any [fol. 219] plan whatever for the acquisition of complainants' properties or that they have entered into any conspiracy, agreement, or understanding of any character with the Administrator of Public Works for the purpose of acquiring the properties of the complainants.

The defendants allege that whenever it has become necessary to acquire transmission lines for the service of municipalities, small villages, and rural areas in the manner provided by the Act, the Authority has attempted to purchase existing privately-owned facilities rather than construct duplicating lines, in order to avoid injury to the complainants. The Authority alleges that under the contract of January 4, 1934, with the Alabama Power Company, Tennessee Electric Power Company, Mississippi Power Company, and Georgia Power Company, all subsidiaries of

the Commonwealth and Southern Company, the Authority contracted for the purchase of certain transmission lines in northern Alabama and for the acquisition of certain facilities of rural areas and small villages in northern Mississippi and that such properties have been already transferred to the Authority.

The Authority further denies that it has ever induced or solicited any municipality to acquire its own municipal power system, but in every instance the municipality has acted solely upon its own initiative. The Authority alleges that when a municipality has determined of its own initiative to acquire its own municipal power system the Authority has recommended that the municipality acquire the existing facilities of complainants rather than construct a duplicating system, and in some instances has attempted to cooperate to that end. The defendants further allege that the Authority is not under contract to purchase, and has no intention of attempting to purchase, any municipal distribution system [fol. 220] owned by any of the complainants for resale to municipalities or otherwise.

The defendants deny that the Authority has ever induced, or solicited any municipality to make application to the Administrator of Public Works for a loan and grant to construct a municipal power system, but that in every instance the municipality has made such application upon its own initiative.

The defendants further deny that the Administrator of Public Works has granted any such application upon the request of the defendants. The defendants allege that in one case the defendant Lilienthal requested the Administrator of Public Works and he agreed to suspend granting the application of the City of Florence for a loan and grant for the construction of a municipal power plant, and that the sole purpose of the defendant was to dissuade the municipality from its determination to construct duplicating facilities, and to permit negotiations for the acquisition of the existing facilities of the Alabama Power Company in order to avoid injury to the company. The defendants allege that the City of Florence on its own initiative had determined to construct its own facilities and objected to purchasing the facilities of the Alabama Power Company at the price at which the Alabama Power Company was willing to sell. The defendants further allege that the City of Florence

has since purchased the municipal distribution system of the Alabama Power Company and at a price considerably higher than the maximum price which the city was willing to pay at the time the Authority requested the Administrator to suspend the granting of a loan and grant to the city.

20

Except as expressly admitted in this answer, the defend-
[fol. 221] ants deny the material allegations of fact contained in Section XX of said bill of complaint.

21

The defendants deny the material allegations of fact contained in Section XXI of said bill of complaint.

22

The defendants deny the material allegations of fact contained in Section XXII of said bill of complaint.

23

The defendants are informed that the allegations contained in Section XXIII of said bill of complaint are conclusions of law which they are not required to answer, but if construed to be allegations of fact deny every material allegation thereof.

24

The defendants are informed that the allegations contained in Section XXIV of said bill of complaint are conclusions of law which they are not required to answer, but if construed to be allegations of fact deny every material allegation thereof.

25

The defendants are informed that the allegations contained in Section XXV of said bill of complaint are conclusions of law which they are not required to answer, but if construed to be allegations of fact deny every material allegation thereof.

26

The defendants deny the material allegations of fact contained in Section XXVI of said bill of complaint.

[fol. 222]

Part II

For further answer to the bill of complaint as it relates to each of the separate complainants, the defendants say:

A. As to complainant Tennessee Electric Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) Defendants allege that said complainant is estopped to challenge the validity of the Tennessee Valley Authority Act or the acts of the defendants pursuant thereto for the reason that the said complainant has voluntarily accepted and received benefits under the Act and the acts of the defendants pursuant thereto, all in the respects challenged in the bill. In particular, defendants allege that this complainant is a party to a contract with the defendant Authority, dated January 4, 1934, a true and correct copy of which is attached hereto as Exhibit "B," and hereby incorporated herein; that said contract has been extended by agreement dated October 7, 1936, until February 3, 1937; that under said contract this complainant has purchased large quantities of electric energy from the defendant Authority and has thus recognized the legality of the generation and sale of such energy by the defendant Authority and has thus relied upon the validity of the Act of Congress creating the defendant Authority, having actually received benefits under such Act and contract; that even before execution of the said contract this complainant purchased large amounts of power from defendant Authority; that thereafter the complainant Tennessee Electric Power Company availed itself of the following amounts of power supplied by the defendant under the aforementioned contract for the periods specified below:

[fol. 223]

Period	Energy purchased by Tennessee Electric Power Company
January 4, 1934, to June 30, 1934	37,485,000 kwh.
Fiscal year ending June 30, 1935	2,438,100 kwh.
Fiscal year ending June 30, 1936	110,463,800 kwh.
July 1, 1936, through August 31, 1936	68,555,300 kwh.

The said complainant is still continuing to purchase large amounts of power generated by the defendant Tennessee

Valley Authority. During the low-water period from June 1, 1936, through August 31, 1936, the company had need for and utilized very substantial blocks of power supplied by the defendant Authority, the amounts purchased and relation to net system requirements of the complainant company being as follows:

Period	Energy supplied by defendant (kwh.)	Net system requirements of company	Percentages
June, 1936	31,534,600	77,164,200	40.87
July, 1936	34,100,700	83,430,300	40.87
August, 1936	34,454,800	86,510,800	39.83

During the present low-water season of the year 1936, during which a shortage of power has existed among the companies of the Commonwealth and Southern system, including this complainant, and when the demand of these companies for power from the Tennessee Valley Authority has exceeded the amount that could be supplied by firm power generated at Wilson Dam before the construction and operation of Norris and Wheeler Dams, this complainant, together with the other companies in the Commonwealth and Southern system, for its own benefit and for the purpose of meeting the shortage of power, purchased, used and sold, and is still purchasing, using and selling, large quantities of power made available by the Tennessee Valley Authority, as set out in the preceding table, including power generated, and known by it to have been generated, at Norris and Wheeler Dams and the increment of power made available, [fol. 224] and known to have been made available, at Wilson Dam by the release of water by Norris Dam from the Norris reservoir.

Under the contract of January 4, 1934, the said complainant agreed with defendant Tennessee Valley Authority, for the mutual benefit of both parties, to interchange electric energy at points designated in the contract; said interchange agreement has continuously been performed and said complainant has received, and is still receiving, the benefit of said contract in that it has received, and is still receiving, power from the Authority at points needed to serve its own customers.

Under the contract of January 4, 1934, the complainant Tennessee Electric Power Company agreed to supply the power required by the Authority for the construction of

Norris Dam and power plant on an interchange basis, that is, it agreed to deliver the required amounts of power to the Authority in the vicinity of Norris Dam in return for the receipt at Wilson Dam, Alabama, of equivalent amounts of power from the Authority; pursuant to said contract the company has delivered under this arrangement, and is still delivering, large amounts of power which were essential and which the company knew, and has at all times known, to be essential to the construction of Norris Dam, and that such power was specifically intended to be used for such purposes, and received an equivalent amount of energy from the Authority; and the company constructed a transmission line for service to the Authority in the construction of Chickamauga Dam and has knowingly supplied all the electricity needed for the construction of said dam; and the said interchange of power for the construction of Norris and Chickamauga Dams has benefited said complainant in that said complainant has been enabled to receive from Authority a supply of power at the place needed by complainant to serve its customers.

[fol. 225] As a part of the consideration in said contract of January 4, 1934, the defendant Authority agreed to limit its sales of surplus power to particular specified territory, with certain exceptions hereinafter related more fully, and to refrain from making sales in other territories served by the Commonwealth and Southern companies, including this complainant; that said agreement has been and is being carried out to the detriment and injury of the Tennessee Valley Authority and to the benefit of this complainant, which has knowingly received, and is still knowingly receiving, the benefits of this agreement and compliance therewith by the defendant Authority.

(3) The said complainant Tennessee Electric Power Company cannot question the validity of the construction and operation of Norris Dam by the Authority for the reason that said complainant now owns many acres of land which have been flooded and upon which Norris Dam and power plant and the reservoir which was created by the said Norris Dam are located; and the said complainant consented to the occupation of its land for the construction of said dam and reservoir, and it has agreed to sell the said lands to the Tennessee Valley Authority in return for the obligation of the Authority to pay therefor.

(4) This complainant can claim no right of contract or property because of the construction and operation of its hydroelectric project at Hales Bar on the Tennessee River as against the United States or any agency thereof, since said structure has not been constructed or operated according to the conditions prescribed by the Act of Congress granting permission to proceed with the project. The dam, as constructed, is defective and does not subserve the functions of the Government of the United States in the statutory terms on which the grant was conditioned. [fol. 226] The officials of the United States delegated to accept this property on behalf of the United States, so as to complete the arrangement under which this complainant now claims rights, have refused to accept this structure because of the defects heretofore referred to and said complainant has failed to correct said defects and to make said conveyance, all in violation of the statute and the laws of the United States.

(5) The valid existence of the so-called franchise of this complainant in the City of Chattanooga is now being litigated in the state courts of Tennessee, the City of Chattanooga having filed suit to have the franchise of this complainant to do business in that city declared void as an unlawful perpetuity within the prohibition of the constitution of the State of Tennessee. Defendants are informed and believe, and therefore allege, that the said indeterminate electric power franchise in the City of Chattanooga is a nullity; that the company is operating in the city without a franchise and on sufferance only. Defendants are further informed and believe, and therefore allege, that many, if not most, of the municipal franchises of this complainant in the State of Tennessee are indeterminate franchises and void under the constitution of the State of Tennessee as unlawful perpetuities within the meaning of the state constitution and that the complainant is operating in such municipalities on sufferance only.

(6) The Authority is not selling or under contract to sell electricity to any municipality in which or to which this complainant is selling and distributing electricity.

The Authority has contracts to sell electricity to, and only to, the municipalities of Dayton, Dickson, and Pulaski, in the alleged territory of complainant. Each of these municipalities did, prior to the date of contract with de-

[fol. 227] fendant Authority for the sale of power and its receiving service under said contract, generate all of its own electric energy. Each of these municipalities is distributing such energy purchased from the Authority on its own distribution system which it owned and operated for a long time prior to the passage of the Tennessee Valley Authority Act. Each of said municipalities has always operated its own generating plant and has never been a customer of the complainant. None of these municipalities is selling energy purchased from the Authority to customers in said municipalities in competition with the complainant and said complainant has no franchise to operate, and does not own or operate, any electrical properties in said municipalities. The sale of electric energy by the Authority for service is these municipalities does not damage the complainant; and any alleged damage to complainant is remote, indirect, speculative, conjectural, and negligible.

The Cities of Dayton and Pulaski, Tennessee, are, under authority of state law, selling electric energy at retail to rural residents outside the municipal limits on rural transmission lines owned and operated by these municipalities. Defendants are informed and believe, and therefore allege, that none of these rural customers has heretofore received service from this complainant; that prior to the beginning of operations by these municipalities in rural areas surrounding them this complainant had not provided or made available electric service to the residents of said rural areas; that for a long time prior to the offers of said municipalities to serve rural customers in the area surrounding them, said complainant had failed to provide electric service, either because it was unprofitable or because it was not interested in providing such service; that this complainant failed to provide such service to residents in [fol. 228] this area notwithstanding there were frequent requests over a long period of years by residents for such service when there was no other agency selling electric energy to which residents could make application.

The percentage of rural electrification in the territory of complainant prior to the creation of the defendant Tennessee Valley Authority was less than four per centum; such rural service as was rendered was almost wholly incidental to service to urban communities and consisted of tapping lines of low voltage primarily intended for service

to urban communities. Defendants are informed and believe, and allege that this complainant made no effort to sell electric power to the rural residents now served by these municipalities or in the vicinity of lines of these municipalities, constructed or under construction, until the complainant had knowledge of definite steps by these municipalities to furnish the service now undertaken or contemplated; not until this complainant knew surveys were undertaken and substantial sums of money expended by the said municipalities in conducting surveys and preparing for construction and operations did complainant show any interest or desire to serve the customers now served by such municipalities, or customers in the vicinity of lines of said municipalities, or do any act directed toward supplying the demands for electricity of the customers and areas served by said municipalities; in all the areas which municipalities are now serving or building lines for serving, the residents thereof had for many years been attempting without success to make arrangements for service from the complainant; any losses which complainant may suffer or acts which complainant may have done in serving, attempting to serve, or make service available to customers in areas served by said municipalities, were done or incurred and [fol. 229] are due to the abandonment of its policy of refusing rural service except as an incident to urban service and to the construction of new rural transmission lines without regard to the profitableness or feasibility thereof, but solely for the purpose of handicapping, obstructing and embarrassing the operations of said municipalities; any damage which complainant might suffer by operations of these municipalities or sales of electric energy by the defendant Authority to said municipalities, or any other acts of defendants Authority are due to its own acts and provide no basis for this action.

This complainant will suffer no damage from activities of these municipalities in rendering service to these rural residents hitherto unserved by the complainant; if said complainant can be said to suffer any damage from sales by these municipalities or sales of the Authority to said municipalities, such damage is so indirect, remote, speculative, hypothetical, conjectural and negligible as to constitute no basis for this action on behalf of this complainant; any competition which may result in said rural areas

served by these municipalities is competition from these municipalities and not from the defendant Authority; if these municipalities have served or will serve rural residents as customers which might otherwise be served by said complainant, the failure to obtain such potential customers will be due to the acts of these municipalities and not to acts of the defendant Authority.

(7) The defendant Authority is under contract to sell electricity at wholesale to certain non-profit corporations organized under the laws of the State of Tennessee; such corporations are cooperative membership corporations organized and doing business for the benefit of their members only and not for profit. As of the present date the Author-[fol. 230] ity is under contract to serve the following corporations who own lines or are operating in territory alleged to be operating territory of this complainant: Duck River Electric Membership Corporation, Pickwick Electric Membership Corporation, Meigs County Electric Membership Corporation, and the Middle Tennessee Electric Membership Corporation.

The corporations listed above, as of the present date were serving the following number of customers:

Pickwick Electric Membership Corporation	597
Duck River Electric Membership Corporation	317
Middle Tennessee Electric Membership Corporation	Not yet served
Meigs County Electric Membership Corporation	317

These corporations own transmission lines from which this service is rendered as follows:

Rural Transmission Lines:

Duck River Electric Membership Corporation	115 miles
Pickwick Electric Membership Corporation	96.3 "
Meigs County Electric Membership Corporation	110 "

Also, there are under construction some 261 miles of rural transmission lines to be owned and operated by the Middle Tennessee Electric Membership Corporation. There are also under construction approximately 200 miles of rural transmission lines to be owned and operated by the Meigs County Electric Membership Corporation.

None of these corporations is selling energy purchased from the Authority to customers which have heretofore received service from this complainant; the service furnished by these corporations constitutes new and additional service to rural residents not previously served. Said rural residents served by these corporations were without electric service prior to the initiation of operations by said corporations, and for a long time prior to the efforts of said corporations, said complainant failed to provide electric service either because it was unprofitable, or because it was not interested in providing such service, notwithstanding frequent requests over a long period of years by residents for such service when there was no other agency selling electric energy to which residents could make application.

Defendants are informed and believe, and allege that this complainant made no effort to sell electric power to the rural residents now served by these corporations or in the vicinity of lines of these corporations constructed or under construction until the complainant had knowledge of the initiation of definite operations by these corporations looking to furnishing the service now undertaken or contemplated; not until this complainant knew surveys were undertaken and substantial sums of money expended by the said corporations or the organizers thereof in conducting surveys and preparing for construction and operations did complainant show any interest or desire to serve the customers now served by such corporations, or customers in the vicinity of lines of said corporation, or do any act directed toward supplying the demands for electricity of the customers and areas served by said corporation; in all the areas which corporations are now serving or building lines for serving, the residents thereof had for many years been attempting without success to make arrangements for service from the complainant; any losses which complainant may suffer or acts which complainant may have done in serving, attempting to serve, or making service available to customers in areas served by said corporations were [fol. 232] done or incurred and are due to the abandonment of its policy of refusing rural service except as an incident to urban service and to the construction of new rural transmission lines without regard to the profitableness or feasibility thereof, but solely for the purpose of handicapping, obstructing and embarrassing the operations of said cor-

porations; any damage which complainant might suffer by operations of these corporations or sales of electric energy by the defendant Authority to said corporations, or any other acts of defendant Authority are due to its own acts and provide no basis for this action.

Any alleged damage to said complainant from operations by these corporations or the sale of power by the defendant Authority at wholesale to said corporations is so indirect, remote, speculative, conjectural and negligible as to constitute no basis for the maintenance of this action on behalf of said complainant. Any competition which may result in rural areas now or in the future served by these corporations is competition from these corporations and not from the defendant Authority; if these corporations have served or will serve rural residents as customers which might otherwise some time in the future be served by said complainant, the failure to obtain such potential customers will be due to acts of these corporations and not to acts of the defendant Authority.

(8) The Authority has constructed or is constructing, and now owns rural transmission lines for a distance of 127 miles in Lincoln County, 30 miles in Anderson County, 5 miles in Knox County, and 10 miles in Roane County, within the alleged operating areas of complainant as alleged by the bill. The defendant Authority is using said lines to sell electric energy at retail to 482 rural residents in Lincoln County, 210 rural residents in Anderson County, 35 rural [fol. 233] residents in Knox County, and 70 rural residents in Roane County.

None of the rural residents now being served by the Authority was being served by this complainant prior to the time when such operations were initiated by the Authority, except that the Authority acquired from this complainant for a good and valuable consideration a short strip of rural transmission line in the immediate vicinity of Norris Dam, primarily for service to the Authority itself, and has been serving the rural customers of the company who were served from said strip of line. For a long time this complainant failed to provide service to the rural residents now being served by defendant Authority. This failure to attach these rural residents as customers was because it was unprofitable or because of lack of interest, notwithstanding repeated requests on the part of some of them for rural

service. This complainant will suffer no injury or damage because of the acts of the defendant Authority in selling electricity to these rural customers, and the alleged damage because of said sales is remote, indirect, speculative, hypothetical and negligible

(9) Defendants further allege that the Authority is under contract to serve the Monsanto Chemical Company, an industrial corporation located in Maury County, Tennessee, within the operating area of complainant as alleged by the bill; that the defendant Authority is now serving this customer. The Monsanto Chemical Company has only recently initiated operations and begun the construction of a plant in that vicinity, and has heretofore had no need for electric energy from this complainant at any place and has not contracted with this complainant for the purchase of electric energy at this or any other point; upon information and belief defendants allege that in the absence of the [fol. 234] Authority in said area said complainant would not have served the Monsanto Chemical Company. This sale of power to the Chemical Company under this contract does not damage said complainant; and any claimed damage because of said contract is remote, indirect, speculative, hypothetical and negligible.

(10) Service under all the contracts hereinabove referred to in the alleged territory of this complainant as described in the bill of complaint has been in full compliance with the contract of January 4, 1934, between complainant and the defendant Authority; under the terms of that contract the Authority agreed for the duration of the contract not to sell electric energy in the territory generally served by this complainant and other members of the Commonwealth and Southern system except that it was provided that the defendant Authority might sell electric energy in the territory served by this complainant and the other members of the Commonwealth and Southern system up to a demand of 2,500 kw.; all of the sales of power in the area of complainant and other members of the Commonwealth and Southern system, exclusive of the areas in which the Commonwealth and Southern Companies agreed to sell their electrical facilities to the defendant Authority, have not exceeded this limitation. The defendant Tennessee Valley Authority, by contract dated October 7, 1936, agreed to extend the contract of January 4, 1934, until February 3,

1937; and further agreed not to serve any customer of any of the Commonwealth and Southern companies signatory to the contract of January 4, 1934, including the complainant, or any customer in the area served by any of such companies (whether or not a customer of any of said companies, including the complainant), except to the extent of service aggregating not more than 4,000 kw. in demand, exclusive of the Monsanto Chemical Company; and this contract does not expire until February 3, 1937, and in itself con-[fol. 235] stitutes a complete and adequate protection of any right or interest which the complainant may have, and is a bar to this suit.

(11) Defendant Authority is not now serving nor has it contracted to serve any customers whatsoever within the alleged operating area of such complainant, except as set out hereinabove, and the possibility of such future and hypothetical service to additional customers in the alleged territory of the complainant or of injury to the complainant resulting from such possible service is remote, indirect, speculative, hypothetical and negligible. The negotiations with the City of Chattanooga or any other municipality now served by the complainant have not resulted in any contract for sale of electric energy, nor has such sale been authorized by defendant Authority, and the possibility that the sale of electric energy under any such hypothetical or future contract would result in injury or damage to this complainant is so remote, because of the non-existence of such contract or necessary transmission facilities, or necessary distribution facilities, that said negotiations do not present a subject for controversy between this complainant and the defendants.

(12) The complainant cannot maintain this present suit upon the allegations set forth in the bill of complaint for the reason that this suit, in so far as this complainant is concerned, is barred by the pendency of two prior actions involving the same parties, and identical issues of fact and law, hereinafter described. More particularly, the defendants allege that there are now pending, and that there were pending at the date of the filing of the bill of complaint in this cause, the following prior actions:

[fol. 236] The Tennessee Electric Power Co. v. Lenoir City, Tennessee Valley Authority, Ickes, et al., which action, by number Equity No. 1873, was in-

stituted in November, 1935, in the Chancery Court of Loudon County, Tennessee.

The Tennessee Electric Power Co. v. Lewisburg, Tennessee Valley Authority, Ickes, et al., which action, by number Equity No. 1467, was instituted November 18, 1935, in the Chancery Court of Marshall County, Tennessee.

Attached hereto, marked Exhibits "C" and "D", respectively, and made a part hereof, are the bills of complaint in said actions. Both of said actions are substantially similar, each attacking the constitutionality of the Tennessee Valley Authority Act and seeking to enjoin the defendant municipalities in the respective cases from borrowing or accepting loans or grants from the defendant Ickes, as Federal Emergency Administrator of Public Works, and to enjoin the said municipalities from purchasing power from the Tennessee Valley Authority on the ground that the sale of such power is a part of an alleged unlawful program of the Authority in selling electric energy over transmission lines in unlawful competition with private enterprise; and in each of said cases it is alleged that the defendant municipalities and the Authority propose to enter into contracts for the sale by the Authority to the respective municipalities of electric energy to be utilized in the operation of the proposed respective municipal distribution systems, the tenor of such proposed contracts being alleged substantially in the terms of the bill of complaint in this present cause. Each of said bills contains a general attack upon the validity of the Tennessee Valley Authority Act as a subterfuge for a national power program, and alleges that the defendant Authority is exceeding the powers lawfully granted to it by the said Act.

In the case of The Tennessee Electric Power Co. v. Lenoir City, Tennessee Valley Authority, Ickes, et al., hereinabove [fol. 237] referred to, service was had on the Authority on November 27, 1935. On December 28 demurrers were filed on behalf of the Authority and Lenoir City, the Authority adding a motion to strike. The cause was continued to the next term of court by order entered May 4, 1936. On November 5, 1936, an order was entered continuing the cause to the next term of court, and said cause is now pending in the said court.

In the case of *The Tennessee Electric Power Co. v. City of Lewisburg, Tennessee Valley Authority, Ickes, et al.*, hereinabove referred to, service was had on the Authority on November 26, 1935. Answers were filed by the city and by the Authority on January 25 and 26, 1936, respectively. The restraining order originally entered at the time of the filing of the bill was modified on April 21, 1936, following a hearing held March 25. On March 23, 1936, complainant filed a supplemental bill, and on August 14, 1936, the City of Lewisburg filed a supplemental answer. On September 3 the complainants filed a second supplemental bill, and on October 3 the City of Lewisburg filed an answer to the second supplemental bill. On October 3, 1936, the suit was dismissed, without prejudice, as to defendants Tennessee Valley Authority and Harold L. Ickes.

(13) This complainant is not affected or injured by sales of power by the Authority or related acts outside the complainant's alleged territory and therefore cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 238] B. As to the complainant West Tennessee Power & Light Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) The Authority is not selling or under contract to sell electricity in or to any municipality in which this complainant is selling and distributing electricity except that defendant Authority has contracted and is now serving the City of Jackson with electric energy solely for street lighting and similar municipal purposes, the contract between the said City of Jackson and the defendant Authority specifically prohibits any resale by the city of electricity purchased from the Authority. At the date of this contract with the City of Jackson and for a long period prior thereto, and sales thereunder, the city did not purchase electric energy from the complainant for the municipal purposes for which it now purchases energy from the Authority, but generated electric energy at its own plant; sales of electric energy by the Authority to the said city do not damage the complainant, and any alleged damage to complainant is remote, indirect, speculative, conjectural, and negligible.

(3) The Authority is not selling or under contract to sell electric energy to any municipality in the alleged territory of complainant except that the Authority is under contract to sell and is selling, electricity to the Cities of Bolivar and Somerville, Tennessee, two municipalities located in the alleged operating territory of the complainant; each of these municipalities, prior to the date of contract with defendant Authority for the sale of power and the inauguration of service thereunder, generated all of its electric energy; each of said municipalities has always operated its own generating plant and has never been a customer of [fol. 239] complainant; each of these municipalities is distributing such energy purchased from the Authority on its own distribution system which it owned and operated for a long time prior to the passage of the Tennessee Valley Authority Act; for a long time prior to the date of the contracts and the beginning of service under said contracts, these municipalities operated their own generating and distribution facilities and this complainant did not and does not contract with or sell electric power to or within these municipalities and has no franchise to do so; and the sale of electric energy to these cities by the Authority does not, and does not threaten to, damage the said complainant, and any alleged damage to said complainant because of said contract and sales thereunder is remote, indirect, speculative, conjectural, and negligible.

(4) The Authority has contracted with the Gibson County Electric Membership Corporation and has authorized the execution of a contract with the Southwest Tennessee Electric Membership Corporation to sell electric energy at wholesale, both of such parties being cooperative membership corporations organized under the state laws of Tennessee for the benefit of their own members and not for profit; that existing lines of the Gibson County Electric Membership Corporation are located in territory described by the bill of complaint as operating territory of this complainant, and the Gibson County Corporation is serving approximately 347 rural residents off of 102 miles of rural transmission lines; none of these rural residents served by the Gibson County Corporation were served by complainant but constitute new and additional service to customers not previously enjoying electric service.

The lines of the Southwest Tennessee Electric Membership Corporation will in the near future be constructed in

[fol. 240] territory described by the bill of complaint as operating territory of this complainant. These lines will serve rural resident- not now, or-in the past, served by this complainant.

Prior to the beginning of rural electrification operations by these corporations, this complainant did not provide and is not now providing electric service to the residents of said rural areas; for a long time prior to the efforts of said corporations to serve rural customers in this area, said complainant had failed and refused to provide electric service either because it was unprofitable or because the complainant was not interested in providing such service, notwithstanding frequent requests over a long period of years by residents of such areas for such service when there was no other agency selling electricity to which residents could make application. The percentage of rural electrification in the territory of this complainant prior to the creation of the defendant Tennessee Valley Authority was less than five per centum; such rural service of complainant as was rendered was solely incidental to service to urban communities and consisted of tapping lines of low voltage primarily intended for service to urban communities; this complainant will suffer no damage from activities of these corporations in rendering service to these rural customers hitherto unserved by the complainant; and any damage to said complainant from operations by these corporations is indirect, remote, speculative, conjectural, and negligible.

Any competition which may result in said rural areas in the future is competition from these corporations and not from the defendant Authority; if these corporations have served, or will serve, rural residents as customers which might otherwise sometime in the future be served by said complainant, the failure to obtain such potential customers [fol. 241] will be due to acts of these corporations and not to acts of the defendant Authority.

(5) Defendant Authority is not now serving, nor has it contracted to serve, any customers whatsoever within the alleged operating area of complainant as described by the bill, except as set out hereinabove, and the possibility of future and hypothetical service to other customers in the alleged area of the complainant or of injury to the complainant resulting from such possible service is remote, indirect, speculative, conjectural, and negligible.

(6) This complainant is not affected or injured by sales of power by the defendant Authority outside the complainant's territory, and, therefore, cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 242] C. As to the complainant Mississippi Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) Defendants allege that said complainant is estopped to challenge the validity of the Tennessee Valley Authority Act or the acts of the defendants pursuant thereto for the reason that the said complainant has voluntarily accepted and received benefits under the Act and the acts of the defendants pursuant thereto, all in the respects challenged in the bill. In particular, defendants allege that this complainant is a party to a contract with the defendant Authority, dated January 4, 1934, and as hereinabove more particularly described, which contract has been extended by agreement dated October 7, 1936, until February 3, 1937; complainant is a subsidiary of the Commonwealth and Southern Corporation, and the Tennessee Electric Power Company, Alabama Power Company, and Georgia Power Company, all of whom are subsidiaries of the Commonwealth and Southern Corporation, were also parties to said contract and the extension thereof; complainant does not generate any substantial part of the electricity which it sells, but purchases its electricity supply from the Alabama Power Company; under said contract and the extension thereof, the Authority agreed to sell large quantities of electricity to the various Commonwealth and Southern subsidiaries who were parties to said contract; the systems of all of said subsidiary companies are interconnected, and the purchase of electricity by any of said companies operates to the benefit of all of said companies, in recognition whereof each of said subsidiary companies, including the complainant, agreed to joint and several liability for all power purchased from the Authority under said contract, and all of said companies appointed a single joint agent to whom said [fol. 243] power should be billed on behalf of all of said companies.

Under said contract the following amounts of power have been purchased by said companies, acting through said

agent, for all of which the said complainant is jointly and severally liable:

Period	Net Energy Delivered
January 4, 1934, to June 30, 1934.....	147,200,293 kwh.
Fiscal year ending June 30, 1935.....	2,902,620 kwh.
Fiscal year ending June 30, 1936.....	296,038,486 kwh.
July 1, 1936, through September 30, 1936..	262,884,683 kwh.

The said purchases were commingled with the other power produced or purchased by the said companies, and the defendants are not advised as to the precise amount of such power which was used directly in the operations of the said complainant; however, complainant largely benefited and profited through the purchases of power by its agent for the use of itself and the other Commonwealth and Southern companies, and has used tremendous quantities of the power purchased from the defendant Authority in its operations and still continues to do so.

During the present low-water season of the year 1936, during which a shortage of power has existed among the companies of the Commonwealth and Southern system, including this complainant, and when the demand of these companies for power from the Tennessee Valley Authority exceeded the amount that could be supplied by firm power generated at Wilson Dam before the construction of Norris and Wheeler Dams, this complainant, together with the other companies in the Commonwealth and Southern system, for its own benefit and for the purpose of meeting the shortage of power, purchased and used large quantities of power from [fol. 244] the Tennessee Valley Authority, as aforesaid, including power generated, and known by it to have been generated, at Norris and Wheeler Dams, and the increment of power made available, and known to have been made available, at Wilson Dam by the release of water by Norris Dam from the Norris Reservoir, and continues to do so.

The interchange agreement between the defendant Authority and the Alabama and Tennessee Electric Power Companies enabled, and continues to enable, the latter companies to supply the demands of said Mississippi Power Company, and said complainant has received, and continues to receive, the benefits of said interchange agreement.

As a part of the consideration in said contract of January 4, 1934, and the extension thereof, the defendant Authority

agreed to limit its sales of surplus power to particular specified territory, with certain exceptions hereinafter related more fully, and to refrain from making sales in other territory served by the Commonwealth and Southern companies, including this complainant; said agreement has been carried out to the detriment and injury of the Tennessee Valley Authority and to the benefit of this complainant, which has knowingly received, and is still knowingly receiving, the benefits of this agreement and compliance therewith by the defendant Authority.

The complainant, under the terms of a certain contract, dated January 4, 1934, between this complainant and other subsidiaries of the Commonwealth and Southern Corporation, on the one hand, and the defendant Authority on the other, sold and conveyed to the defendant Authority, for good and valuable consideration, to wit, the sum of \$850,000, all of its electrical properties in the Counties of Pontotoc, Lee, Itawamba, Union, Benton, Tippah, Prentiss, Tishomingo, and Alcorn, in the State of Mississippi; this conveyance was made approximately two and one-half years [fol. 245] ago, on, to wit, June 1, 1934; this contract and the conveyance thereunder were made with full knowledge by this complainant that certain of said properties were to be used by the defendant Authority for facilitating the sale of electric energy; simultaneously with the sale of such facilities to the defendant Authority, the Authority sold and conveyed such part of the transferred distribution facilities as were in Alcorn County to the Alcorn County Electric Power Association for a substantial consideration, and such facilities have been owned and operated by said Association from June 1, 1934, until the present date, and from time to time the Authority has conveyed the remainder of such of the transferred facilities as were useful in the retail distribution of electricity to various municipalities and cooperative associations of the State of Mississippi for good and valuable considerations. Having accepted the benefits of said transaction, and having recognized the legal authority of the defendant Authority to purchase and utilize these properties for the sale of electric energy, this complainant cannot now question the legal power of the defendant Authority to generate, transmit and sell electric energy in the manner set out in said bill of complaint.

(3) Defendants allege as a separate defense that under the contract of January 4, 1934, hereinabove described, this

complainant conveyed to the defendant Authority all rights, powers, privileges, franchises, and contracts in connection with its business in the counties heretofore mentioned and, therefore, this complainant has no property rights in that territory providing a basis for suit to enjoin operations of the type described in the bill by the defendant Authority in that territory.

(4) The Authority is not now selling power, has not contracted to sell power, and has not authorized the sale of [fol. 246] power to any customer within the territory in which the complainant is in fact operating, nor is any wholesale purchaser of power from the Authority disposing of such power at retail within such operating territory of the said complainant.

(5) The Authority is not selling or under contract to sell electricity to any person, municipality, or corporation operating outside the territory covered by the contract of January 4, 1934, and within the claimed operating area of complainant as alleged in the bill, except that the defendant Authority is under contract to serve and is serving the Cities of Okolona in Chickasaw County, Amory in Monroe County, the Monroe County Electric Power Association, which operates in parts of Monroe and Lowndes County, and the Pontotoc Electric Power Association, which operates in Pontotoc County and a part of Calhoun County, all in the State of Mississippi. The City of Okolona and the City of Amory at the date of the respective contracts with the defendant Authority for the sale of power and at the date when service was commenced under said contract and for a long time prior thereto, and prior to the enactment of the Tennessee Valley Authority Act, owned and operated their own generating and distribution facilities and generated and distributed electric energy to all those desiring electric service in these municipalities; said municipalities were not and have never been customers of this complainant; the complainant does not have any franchises or electrical facilities for carrying on a utility business in said municipalities. Sales of electric energy by the Authority to these municipalities do not damage or threaten to damage the said complainant; and any alleged damage to said complainant is remote, indirect, speculative, conjectural and negligible.

The City of Okolona is engaged in serving rural customers outside its corporate limits, under authority of the

[fol. 247] laws of the State of Mississippi, with power purchased at wholesale from the Authority, but defendants are informed, believe and allege that none of said rural customers have heretofore received service from this complainant or are within service distance of the facilities of this complainant, nor has this complainant ever made electric service available to any of such customers; prior to the beginning of operations by the City of Okolona in the rural areas surrounding it, this complainant had not provided or made available electric service to the residents of said rural areas; for a long time prior to the offers of this city to serve rural customers in the area surrounding it, said complainant had failed to provide electric service either because it was not interested in providing such service, or because it was unprofitable to do so. This complainant will suffer no injury or damage from activities of this municipality in rendering service to these rural residents hitherto unserved by this complainant; and any alleged damage from sales by the municipality is indirect, remote, speculative, hypothetical, conjectural and negligible.

Any alleged damage because of this service to rural customers is due to acts of the city and not to the acts of the defendant Authority.

Defendant Authority has contracted with the Monroe County Electric Membership Corporation to sell electric energy at wholesale; said corporation is a non-profit corporation organized under the laws of the State of Mississippi for the benefit of its members; existing lines of this corporation are located in the claimed operating territory of this complainant; the Monroe County Corporation is serving approximately 318 rural residents off of approximately 65 miles of rural transmission line; and none of these rural residents served by the Monroe County Electric Membership Corporation were ever served by complainant but constitute new and additional customers not previously enjoying electric service.

The Pontotoc County Electric Power Association, which purchases all of its electricity requirements from the Authority, has constructed a line from Pontotoc in Pontotoc County to Bruce in Calhoun County, and is serving customers along the said transmission line and in the said City of Bruce. The distribution system in the City of Bruce was constructed, owned and operated until on or

about February 12, 1936, by the E. L. Bruce Lumber Company, and on that date said property was purchased, and is now operated, by the Pontotoc County Electric Power Association, and the Mississippi Power Company is not now operating, nor has it ever operated in the portion of Calhoun County in which the said City of Bruce is located, nor along the route of the transmission line from Pontotoc to Bruce, nor has it ever owned any electrical facilities in the vicinity of said line or of the Bruce distribution system, except the facilities in Pontotoc County which are not alleged by the bill to be within the operating territory of the said complainant. Prior to the beginning of rural electrification operations by this corporation, this complainant did not provide, and is not now providing, electric service to the residents of said rural areas. For a long time prior to the offer of said corporation to serve rural customers in this area, said complainant had failed and refused to provide electric service either because it was unprofitable or because the complainant was not interested in providing such service, notwithstanding the fact that there were frequent requests over a long period of years by residents of such areas for such service. This complainant will suffer no damage from activities of this corporation in rendering service to these rural customers hitherto unserved by the complainant; the percentage of rural electrification in the territory of this complainant prior to the creation of the defendant Tennessee Valley Authority was less than three [fol. 249] per cent; such rural service of complainant as was rendered was solely incidental to service of urban communities and consisted of tapping lines of low voltage primarily intended for service to urban consumers. Any alleged damage to said complainant from operations by this corporation is indirect, remote, speculative, conjectural and negligible. Any competition which may result in rural areas served by the Monroe or Pontotoc Associations is competition from these corporations and not from defendant Authority; if these corporations have served or do serve rural residents as customers which might otherwise some time in the future be served by the said complainant, the failure to obtain such potential customers will be due to the acts of these corporations and not to acts of the defendant Authority.

Service under said contracts with the Monroe County Association or the Pontotoc Association has been in full

compliance with the contract of January 4, 1934, between the complainant and defendant Authority; under the terms of that contract the Authority agreed for the duration of the contract not to sell electric energy in the territory generally served by this complainant and other members of the Commonwealth and Southern system, except that it was provided that the defendant Authority might sell electric energy in such territory up to a demand of 2500 kw; the sales of power in the area of complainant and other members of the Commonwealth and Southern system, exclusive of the areas in which the Commonwealth and Southern companies agreed to sell their electrical facilities to the defendant Authority, have not exceeded this limitation. The defendant Authority, by contract dated October 7, 1936, agreed to extend said contract of January 4, 1934, until February 3, 1937, and further agreed not to serve any customers of any of the Commonwealth and Southern [fol. 250] companies signatory to the contract of January 4, 1934, including the complainant, nor any customers in the area served by any of such companies (whether or not a customer of any of said companies, including the complainant) except to the extent of service aggregating not more than 4000 kw of demand, exclusive of the Monsanto Chemical Company; and this contract, which does not expire until February 3, 1937, in itself constitutes a complete and adequate protection to any right or interest which the complainant may have and is a bar to this suit.

(6) By the contract of January 4, 1934, and the extension thereof, the said complainant agreed to sales of power by the Authority, without limitation as to amount or location, to any municipality which was not on January 4, 1934, being served by power companies. The said Cities of Okolona and Amory were not served by complainant, and the said cities were not on January 4, 1934, or on any other date, customers of complainant, and the complainant cannot question the right of the Authority to sell power to the said cities.

(7) The Authority is not now serving, nor has it contracted to serve, any customers whatsoever, nor has it authorized service to customers in the operating territory of said complainant as described by the bill of complaint except as set out hereinabove, and that the possibility of future and hypothetical service to additional customers, or

damage to the complainant resulting from such possible service, is remote, indirect, speculative, conjectural and negligible.

(8) This complainant is not affected or injured by sales of power by the Authority outside the complainant's territory, and, therefore, this complainant cannot complain of said sales of power by the Authority or other acts related thereto.

[fol. 251] D. As to complainant Tennessee Public Service Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) The only franchise granted to this complainant by the City of Knoxville for the operation of an electric system in the municipal limits of the City of Knoxville is an indeterminate franchise; and defendants are advised that such franchises are invalid as perpetuities within the meaning of the prohibition of the constitution of the State of Tennessee; that, therefore, complainant is operating within said City of Knoxville without any valid franchise and solely on sufferance of the city; defendants further allege upon information and belief that all or most of the other municipal franchises of the said complainant are likewise indeterminate and void.

(3) This complainant cannot maintain this present suit upon the allegations set forth in the bill of complaint for the reason that this suit, insofar as this complainant is concerned, is barred by the pendency of prior actions involving the same parties and identical issues of fact and law. More particularly, defendants allege that there is now pending, and that there was pending at the date of the filing of the bill of complaint in this cause, an action styled "*Tennessee Public Service Co. v. Ickes, Tennessee Valley Authority, et al.*," in the Supreme Court of the District of Columbia; that this suit, by number Equity No. 60,883, was filed on March 7, 1936, in that court, and presents a general attack upon the constitutionality of the Tennessee Valley Authority Act and a so-called power program alleged to have been promulgated thereunder, which program is described substantially in the terms of the bill of complaint

[fol. 252] in this cause. The bill of complaint in this pending action seeks temporary and permanent injunctions restraining Administrator Ickes from extending a loan and grant under Title II of the National Industrial Recovery Act (ch. 90, 48 Stat. 200) to the City of Knoxville for the construction of a municipal power system, and seeks to restrain the defendants in this action from offering or contracting to furnish electricity to said city; this suit attacks specifically the contract between the defendant Authority and the city referred to in the bill of complaint in the present cause; service was had on defendant Authority May 7, 1936; a temporary restraining order was issued on the date of the filing of the bill and was replaced on April 3, 1936, by a preliminary injunction. This action is now pending in the Supreme Court of the District of Columbia, and the pendency of this action at the date of the filing of the bill of complaint in the present cause constitutes a full and complete bar to the maintenance of the present suit. Attached hereto and hereby made a part hereof as Exhibit "E" is a true and correct copy of the bill of complaint in this action just described.

There is also pending an action styled "*Tennessee Public Service Co. v. City of Knoxville*," which action, by number Cause No. 26956, was filed on April 13, 1936, in the Chancery Court of Knox County. The bill of complaint in the aforementioned case does not join Tennessee Valley Authority as a party, but attacks the constitutionality of the Tennessee Valley Authority Act and seeks to enjoin temporarily and permanently the construction by the City of Knoxville of a proposed municipal distribution system or execution or consummation by the city of the contract with the defendant Authority for the purchase of electricity referred to in the bill of complaint in the pending cause. This [fol. 253] action presents a general attack upon the constitutionality of the Tennessee Valley Authority Act and a so-called power program alleged to have been promulgated thereunder, which program is described substantially in the terms of the bill of complaint in this cause.

(4) The Authority is not selling or under contract to sell in or to any municipality in which this complaint is selling or distributing electricity except that defendants admit that the Authority has contracted to sell electricity to the City of Knoxville, but the defendants further allege that it has

no transmission line at or near the said city, is not in a position to serve the said city and is under no obligation to construct a line for service to the city until the city is free to construct a municipal distribution system for the disposition of the power which the Authority has agreed to sell the said city; the city is now enjoined from building a municipal distribution system or purchasing said power, by an injunction issued in the Chancery Court of Knox County, Tennessee, in the case above described, and it will be approximately eight months from dissolution of said injunction before transmission facilities for service to Knoxville can be available; and any alleged damage to this complainant from the Authority's future and hypothetical sales of electricity is remote, indirect, speculative, conjectural and negligible.

The resale by the City of Knoxville of energy purchased by it from the Authority does not constitute competition by the Authority with the complainant or cause any legal injury to or afford any ground of complaint to said complainant.

(5) The only other customer which the defendant Authority is serving or has contracted to serve with surplus power in the alleged operating area of the said complainant is Volunteer Portland Cement Company. The Volunteer [fol. 254] Portland Cement Company is an industrial customer located in Knox County outside the City of Knoxville, which is now purchasing its power from the said complainant under a contract which expires April 15, 1937; the contract between defendant Authority and the said Volunteer Portland Cement Company provides that service shall begin on April 15, 1937; defendants have not solicited or in any way attempted to induce said contract with the Volunteer Portland Cement Company, but on the contrary negotiations with the company were undertaken at the express request and solicitation of the said company and on its sole initiative; the Authority proposes to begin service to the said company not earlier than April 15, 1937, as provided by the contract and will not have available the facilities necessary for service to said company prior to that date. The plant of this customer will be interconnected with Wilson Dam. Its maximum demand is 3000 kw. If the complainant has any remedy, it has a complete and

adequate remedy at law, since any possible future damages will be readily calculable.

Defendants further allege upon information and belief that the complainant is serving said Volunteer Portland Cement Company without certificate of convenience and necessity, and that complainant therefore has no standing to challenge the right of the defendant Authority to sell or of said Volunteer Portland Cement Company to buy surplus power of the Authority.

(6) Defendant Authority is not now serving nor has it contracted to serve any customers whatsoever within the operating area of complainant except as set out hereinabove, and the possibility of future and hypothetical service to other customers in the alleged area of the complainant, or of injury to the complainant resulting from such possible service, is remote, indirect, speculative, conjectural, [fol. 255] and negligible.

(7) This complainant is not affected or injured by sales of power by the Authority outside the complainant's territory, and therefore cannot complain of such sales of power by the Authority or acts related thereto.

E. As to the complainant Kentucky-Tennessee Light and Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) This complainant cannot maintain this suit upon the allegations set forth in the bill of complaint for the reason that this suit, insofar as this complainant is concerned, is barred by the pendency of a prior action involving the same parties and identical issues of fact and law. More particularly, the defendants allege that there is now pending, and that there was pending at the date of the filing of the bill of complaint in this cause, a suit entitled "*Kentucky-Tennessee Light and Power Co. v. City of Paris, Tennessee Valley Authority, Ickes, et al.*," Equity No. 4031. This bill was instituted in the Chancery Court of Henry County, Tennessee, December 3, 1935, requesting temporary and permanent injunctions against the defendants doing any acts in furtherance of an alleged agreement for the making of a loan or grant by the PWA to the City of Paris for

construction of a municipal distribution system, attacking the constitutionality of the Tennessee Valley Authority Act, and requesting an injunction prohibiting the purchase of electricity by the city from the Authority. Service was had on the Authority pursuant to summons on December 13, [fol. 256] 1935. The city filed a plea in abatement and a demurrer on January 30, 1936, and the Authority filed an answer on February 3, 1936. On February 12, 1936, the complainant filed a reply to the plea in abatement of the city. The case is now pending. Attached hereto, marked Exhibit "F", and made a part hereof, is a copy of the bill of complaint in said action.

(3) The Authority is not selling, or under contract to sell, electricity to any municipality in which this complainant is selling or distributing electricity.

The Authority is not selling, or under contract to sell, electricity in or to any municipality in the alleged operating area of complainant as described by the bill, except that the Authority has contracted to sell electricity at wholesale to the City of Milan, in Gibson County, Tennessee. At and prior to the date of contract with the defendant Authority and the inauguration of service thereunder, the City of Milan generated and distributed electric energy for and in said city; the City of Milan has for a long time prior to the enactment of the Tennessee Valley Authority Act owned and operated its generating and distribution system, and has never been a customer of the complainant; the City of Milan is not selling electricity outside its corporate limits; the said complainant does not have, and never has had, any franchise to serve, and has not served, within the corporate limits of the City of Milan; there is no competition between the said city and the said complainant; and the sale of electric energy by the Authority to the City of Milan does not, and does not threaten to, damage the said complainant; and any alleged damage to said complainant because of said contract and sales thereunder is remote, indirect, speculative, conjectural and negligible.

[fol. 257] (4) The only other customer whom the Authority is serving, or has contracted to serve, in whole or in part within the alleged operating area of the said complainant, is the Gibson County Electric Membership Corporation; the said corporation is serving approximately 347 rural residents off of its lines; none of these rural residents was ever

served by complainant but such rural residents constitute new and additional customers not previously enjoying electric service. Prior to the beginning of rural electrification operations by said corporation, this complainant did not conduct or make available, and is not now conducting or making available, electric service to the residents of said rural areas; for a long time prior to the efforts of said corporation to serve rural customers in this area, said complainant had failed and refused to provide electric service, either because it was unprofitable or because this complainant was not interested in providing such service, notwithstanding that there were frequent requests over a long period of years by residents of such areas for such service when there was no other agency but complainant to which the residents of said areas could make application for electric service. The percentage of rural electrification in the territory of this complainant prior to the creation of the Tennessee Valley Authority was less than five per centum, and such rural service as was being rendered was incidental to service to urban communities and consisted of tapping lines of low voltage primarily intended for service to urban communities. This complainant will suffer no injury or damage from activities of such corporation in rendering service to these rural customers; and any alleged damage to said complainant from sales by this corporation [fol. 258] is direct, remote, speculative, conjectural and negligible.

Any competition which may result from the said Gibson County Corporation is competition from that corporation and not from the defendant Authority. If this corporation has served or will serve rural residents as customers which might otherwise sometime in the future be served by said complainant, the failure to obtain such potential customers will be due to acts of this corporation and not to the defendant Authority.

(5) Defendant Authority is not now serving, nor has it contracted to serve, any customers whatsoever in the alleged operating area of complainant except as set out hereinabove, and the possibility of such future and hypothetical service to additional customers, in the alleged territory of the complainant, or of injury to the complainant resulting

from such possible service, is remote, indirect, speculative, conjectural and negligible.

(6) This complainant is not affected or injured by sales of power by the Authority or related acts outside the complainant's territory, and therefore cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 259] F. As to the Complainant Birmingham Electric Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) Defendants further allege on information and belief that this complainant does not have a franchise to operate an electric system in the City of Bessemer, Alabama, and is operating within the limits of said city only at the sufferance and pleasure of the said City of Bessemer.

(3) This complainant cannot maintain this present suit upon the allegations set forth in the bill of complaint for the reason that this suit, insofar as this complainant is concerned, is barred by the pendency of prior actions involving the same parties and identical issues of fact and law. More particularly, the defendants allege that there are now pending and that there were pending at the date of the filing of the bill of complaint in this cause two actions styled, "*Birmingham Electric Co. v. Ickes, Tennessee Valley Authority, et al.*," in the Supreme Court of the District of Columbia; that these suits, by number Equity No. 59,510 and Equity No. 59,500, were filed on September 17, 1935, in that court, and present a general attack upon the constitutionality of the Tennessee Valley Authority Act and a so-called power program alleged to be promulgated thereunder, which program is described substantially in the terms of the bill of complaint in this cause; that these bills of complaint in these pending actions seek temporary and permanent injunctions restraining Administrator Ickes from extending a loan and grant under Title II of the National Industrial Recovery Act (ch. 90, 48 Stat. 200) to the Cities of Bessemer and [fol. 260] Tarrant City for the construction of municipal power systems, and seek to restrain the defendants in this action from offering or contracting to furnish electricity to said cities; and that these suits attack specifically certain

power contracts which it is alleged the Authority and the respective defendant municipalities propose to enter into, which contracts are alleged in terms substantially similar to those used in the present bill in describing alleged power contracts between the Authority and the Cities of Bessemer and Tarrant City; that service in both actions was first had on defendants through service on the defendant Lilienthal on December 7, 1935; that preliminary injunctions as prayed were granted in both actions on January 7, 1936, following the prior granting of temporary restraining orders on October 30, 1935; that the Supreme Court of the District of Columbia indefinitely extended the times to answer in both actions at the same time the preliminary injunctions were granted; that both actions are now pending in the Supreme Court of the District of Columbia and constitute a full and complete bar to the maintenance of the present suit. Attached hereto, marked Exhibits "G" and "H," and made a part hereof, are true and accurate copies of the bills of complaint in the actions hereinabove described.

(4) Defendant Authority is not now serving, nor has it contracted to serve, any customers whatsoever within the operating territory of complainant as described by the bill, and the possibility of future and hypothetical service to additional customers in the alleged area of the complainant, or of injury to the complainant resulting from such possible service, is remote, indirect, speculative, conjectural, and negligible.

[fol. 261] Defendants deny that the Authority is under contract to sell electricity to the Cities of Bessemer and Tarrant City, as alleged in subsection (23) of Section XVII of the bill of complaint. There is no physical transmission line connection between properties belonging to the Tennessee Valley Authority and these cities; the construction of any such connecting line has not been authorized by the defendant Authority.

(5) This complainant is not affected or injured by sales of power by the Authority or related acts outside the complainant's territory and therefore cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 262] G. As to the complainant Memphis Power & Light Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) This complainant cannot maintain this suit upon the allegations set forth in the bill of complaint for the reason that this suit, insofar as this complainant is concerned, is barred by the pendency of a prior action involving the same parties and identical issues of fact and law. More particularly, defendants allege that there is now pending, and that there was pending at the date of the filing of the bill of complaint in this cause, an action styled "*Memphis Power & Light Co. v. Ickes, Tennessee Valley Authority, et al.*," in the Supreme Court of the District of Columbia; that this suit, by number Equity No. 61,114, was filed on April 4, 1936, in that court, and presents a general attack upon the constitutionality of the Tennessee Valley Authority Act and a so-called power program alleged to have been promulgated thereunder, which program is described substantially in the terms of the bill of complaint in this cause. The bill of complaint in this pending action seeks temporary and permanent injunctions restraining Administrator Ickes from extending a loan and grant under Title II of the National Industrial Recovery Act (ch. 90, 48 Stat. 200) to the City of Memphis for the construction of a municipal power system, and seeks to restrain the defendants in this action from offering or contracting to furnish electricity to said city. This suit attacks specifically the contract between the defendant Authority and the city, referred to in the bill of complaint in the present cause. Service was had on the Authority May 6, 1936; a temporary injunction was issued on April 9, 1936, replacing a temporary restraining order made upon [fol. 263] the filing of the bill. This action is now pending in the Supreme Court of the District of Columbia. The pendency of this action at the date of the filing of the bill of complaint in the present cause constitutes a full and complete bar to the maintenance of the present suit. Attached hereto and hereby made a part hereof as Exhibit "I" is a true and correct copy of the bill of complaint in this action just described.

(3) The Authority is not selling or under contract to sell to any municipality in or to which this complainant is selling or distributing electricity except that the defendants admit that the Authority has contracted to sell electricity to the City of Memphis. Defendants further allege that the Au-

thority has no transmission line at or near the said city, but admit that it is planned to construct a high tension transmission line connecting Pickwick Dam and the City of Memphis and, further, allege that construction of said transmission line has been initiated; that said line and the necessary substation structures will not be completed for at least ten months from the date of this answer.

The resale by the City of Memphis of energy purchased by it from the Authority does not constitute competition by the Authority with the complainant or cause any legal injury to or afford any ground of complaint to said complainant.

(4) The Authority has authorized the execution of a contract with the Southwest Tennessee Electric Membership Corporation to sell electric energy at wholesale; said corporation is a cooperative membership corporation organized under the laws of the State of Tennessee to do business for the benefit of its members only and not for profit; lines of this corporation will in the near future be constructed in territory described by the bill of complaint as operating territory of this complainant so far as the extent of such territory can be determined from the allegations thereof; these lines will serve only rural residents not now, or in the past, served by this complainant. Prior to the beginning of rural electrification operations by this corporation this complainant did not provide and is not now providing or making available, electric service to the residents of said rural areas; for a long time prior to the efforts of said Southwest Tennessee Electric Membership Corporation to serve rural customers in this area, said complainant had failed and refused to provide electric service either because it was unprofitable or because the complainant was not interested in providing such service, notwithstanding frequent requests over a long period of years by residents of such areas for such service when there was no other agency selling electricity to which such residents could make application.

The percentage of rural electrification in the territory of this complainant prior to the creation of the defendant Tennessee Valley Authority was less than five per centum; such rural service as was rendered was solely incidental to service to urban communities and consisted of tapping

lines of low voltage primarily intended for service to rural communities. This complainant will suffer no injury or damage from activities of this corporation in rendering service to these rural customers hitherto unserved by the complainant; any alleged damage to said complainant is indirect, remote, speculative, conjectural, and negligible. Any competition which complainants may meet in the future in rural areas will be competition from this corporation and not from the defendant Authority; if this corporation has served or will serve rural residents as customers which might otherwise sometime in the future be served by said complainant, the failure to obtain such potential customers [fol. 265] will be due to acts of this corporation and not to acts of the defendant Authority.

(5) Defendant Authority is not now serving nor has it contracted to serve any customers whatsoever within the operating area of complainant as described by the bill, so far as the defendants can determine the extent of that territory from the allegations thereof, except as set out hereinabove, and the possibility of future and hypothetical service to other customers in the alleged area of the complainant or of injury to the complainant resulting from such possible service is remote, indirect, speculative, conjectural, and negligible, and does not constitute a basis for maintaining this action on behalf of this complainant.

(6) This complainant is not affected or injured by sales of power by the Authority or related acts outside complainant's territory, and therefore cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 266] H. As to the complainant Georgia Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) Defendants allege that said complainant is estopped to challenge the validity of the Tennessee Valley Authority Act or the acts of the defendants pursuant thereto for the reason that the said complainant has voluntarily accepted and received benefits under the Act and the acts of the defendants pursuant thereto, all in the respects challenged in the bill. In particular, defendants allege that this com-

plainant is a party to a contract with the defendant Authority dated January 4, 1934, which contract has hereinabove been more particularly described and which contract has been extended by agreement dated October 7, 1936, for three months from November 3, 1936, until February 3, 1937. The complainant is a subsidiary of the Commonwealth and Southern Corporation and the Tennessee Electric Power Company Alabama Power Company and Mississippi Power Company all of whom are subsidiaries of the Commonwealth and Southern Corporation were also parties to said contract and extension thereof; complainant generates only a part of its electricity and purchases most of the remainder from the affiliated companies and the defendant Authority; under said contract and the extension thereof the defendant Authority agreed to sell large quantities of electricity to the various Commonwealth and Southern subsidiaries who were parties to said contract; the systems of all the said subsidiary companies are interconnected and the purchase of electricity by any of the said companies operates to the benefit of all the said companies in that a larger amount of electricity is available in the in-[fol. 267] terconnected systems of such companies for distribution among them as their requirements may demand; in recognition of these joint benefits from the purchase of power from the Authority under said contract each of said subsidiaries of the Commonwealth and Southern Corporation including the complainant agreed by such contract to be jointly and severally liable for all power purchased from the Authority under said contract and all of the said companies appointed a single joint agent to whom power should be billed on behalf of all of said companies; and under said contract the following amounts of power had been purchased by said companies acting through said agent, for all of which the said complainant is jointly and severally liable:

Period	Net Energy Delivered
January 4, 1934, to June 30, 1934.....	147,200,293 kwh.
Fiscal year ending June 30, 1935.....	2,902,620 kwh.
Fiscal year ending June 30, 1936.....	296,038,486 kwh.
July 1, 1936, through September 30, 1936.	262,884,683 kwh.

The said purchases were commingled with the other power produced or purchased by the said companies. The defend-

ants are not advised as to the precise amount of such power which was used directly in the operations of the said complainant; however, complainant largely benefited and profited through the purchases of such power by its agent for the use of itself and the other Commonwealth and Southern companies, and has used large quantities of the power purchased from the defendant Authority in its operations and still continues to do so.

During the present low-water season of the year 1936, during which a shortage of power has existed among the companies of the Commonwealth and Southern system, including this complainant, and when the demand of these companies for power from the Tennessee Valley Authority [fol. 268] has exceeded the amount that could be supplied by firm power generated at Wilson Dam before the construction of Norris and Wheeler Dams, this complainant, together with the other companies in the Commonwealth and Southern system, for its own benefit and for the purpose of meeting the shortage of power, has purchased and used large quantities of power from the Tennessee Valley Authority, as aforesaid, including power generated, and known by it to have been generated, at Norris and Wheeler Dams, and the increment of power made available, and known to have been made available, at Wilson Dam by the release of water by Norris Dam from the Norris Reservoir, and still continues to do so.

The interchange agreement between the defendant Authority and the Alabama and Tennessee Electric Power Companies enabled, and continues to enable, the latter companies to supply the needs of said Georgia Power Company, and said complainant has knowingly received and continues to receive the benefits of said interchange agreement.

As a part of the consideration in said contract of January 4, 1934, and the extension thereof, the defendant Authority agreed to limit its sales of surplus power to particular specified territory, with certain exceptions hereinafter related more fully, and to refrain from making sales in other territory served by the Commonwealth and Southern companies, including this complainant; said agreement has been carried out to the detriment and injury of the Tennessee Valley Authority and to the benefit of this complainant, which has knowingly received, and is still know-

ingly receiving, the benefits of this agreement and compliance therewith by the defendant Authority.

(3) Heretofore, and before the complainant Georgia Power Company filed the present bill in the Chancery [fol. 269] Court of Knox County, to wit, on May 1, 1934, the Georgia Power Company brought a suit against the defendants in the Superior Court of Catoosa County, Georgia, which suit was removed to the Federal Court for the Northern District of Georgia on motion of the defendants; and the said suit was for the same matter and demand, and to the same effect and for like relief as the complainant does by its present bill, to a large extent, demand and set forth; that is to say, the complainant in its said former suit alleged that:

The defendant Tennessee Valley Authority was engaged in the construction of certain transmission and rural distribution lines in northern Georgia and was negotiating to induce certain municipalities in northern Georgia which were being served by the complainant to enter into contracts for the purchase of electric energy from the Authority; the defendant Tennessee Valley Authority had executed a contract with certain other defendants, pursuant to which these other defendants were to cause a corporation to be created known as the North Georgia Electric Membership Corporation, to which the Authority would transfer the lines under construction under a long-time purchase contract; the contract between the Authority and the North Georgia Electric Membership Corporation conferred upon the Authority control of the resale and financial policies of the membership corporation; the power to be disposed of by the Authority in northern Georgia was not surplus power produced at Wilson Dam, or any other dam under the control and possession of the Authority, but was to be power generated by and purchased from the Tennessee Electric Power Company; the acts of the Authority complained of were not intended for the purpose of finding a market for the disposition of a legitimate surplus of power, but the sole purpose of the Authority was to influence and compete with the complainant as part of a general program [fol. 270] to regulate the rates of private utilities in the State of Georgia in disregard of the Georgia Public Service Commission; the Authority was endeavoring to solicit existing customers of the complainant in northern Georgia to

purchase electric energy from the Authority, and the Authority was making fraudulent and false representations as to the character of the complainant's service to this end.

The complainant prayed that all of the acts of the defendants complained of be adjudged illegal, and that the court issue an order enjoining such acts.

The defendant Tennessee Valley Authority filed an answer denying the material allegations of complainant's bill, and in particular denying that the Authority had ever solicited or intended to solicit or induce the customers of the Georgia Power Company, or any one, to purchase electric energy from the Authority, but that in every instance contracts of the Authority for the sale of electric energy had been made solely upon the request and initiative of the purchasers. The Authority admitted that it was engaged in constructing certain rural transmission lines in northern Georgia and entered into negotiations with certain municipalities in northern Georgia for the possible sale of the Authority's surplus power to such municipalities, but that such negotiations were solely at the initiative and request of the municipalities. The Authority further alleged that the purpose of the Authority in constructing or proposing to construct any line in northern Georgia was to obtain a market for the disposition of available surplus power at Wilson Dam; that the power to be disposed of over the lines under construction was to be obtained by a valid interchange agreement with the Tennessee Electric Power Company pursuant to which the latter would deliver electric [fol. 271] energy to the customers of the Authority in exchange for energy supplied to it by the Authority at Wilson Dam; that the Authority was constructing certain dams on the Tennessee River and its tributaries, to wit: Pickwick, Wheeler, and Chickamauga Dams on the Tennessee River and Norris Dam on the Clinch River; that the Authority contemplates the construction of a transmission line to connect the lines being constructed in northern Georgia with a substation at Chicamauga Dam, and that some time in the future the lines being constructed in northern Georgia would probably be served with electric energy produced at the dams under construction, as well as by electric energy generated at Wilson Dam.

On complainant's motion for a preliminary injunction, Circuit Judge Sibley, sitting as district judge, held that the construction of the rural lines complained of was within

the powers conferred upon the Authority by the Tennessee Valley Authority Act and the Constitution of the United States, and that the question of the validity of the resale rate provisions of the contract between the Authority and the North Georgia Electric Membership Corporation could not be raised until such time as the Georgia Public Service Commission should endeavor to regulate the resale rates for electric service to be disposed of by the lines under construction.

The order entered by the said court, and the pleadings therein, are attached hereto marked Exhibit "J" and made a part hereof. The opinion of Judge Sibley is published in *Georgia Power Co. v. Tennessee Valley Authority, et al.*, 14 F. Supp. 675 (D. C. N. D. Ga., May 28, 1936).

Notwithstanding the decision of Judge Sibley in said former suit, the same allegations, issues and demands are made and set forth in the present bill of complaint by and on behalf of said complainant Georgia Power Company. [fol. 272] Therefore, this defendant pleads said former suit, proceedings, and adjudication in bar of the averments and claims advanced by the complainant Georgia Power Company in the present bill to the effect that the Authority's construction and operation of lines for the service of rural areas in northern Georgia is invalid or that the validity of the resale rate provisions of the Authority's contracts for the sale of electric energy in northern Georgia can be challenged by complainant, or that the complainant Georgia Power Company has any standing to question the validity of any alleged plan or program had or undertaken under the provisions of the Tennessee Valley Authority Act or any alleged plan or program of the defendants as set out in the bill of complaint in the case above described.

(4) This complainant cannot maintain this present suit upon the allegations set forth in the bill of complaint for the reason that this suit is barred by the pendency of the action described above in paragraph (3) on the date of the filing of the bill of complaint in the present cause, which action involves the same parties and identical issues of fact and law.

(5) The defendant Authority has contracted with the North Georgia Electric Membership Corporation to sell electric energy at wholesale; said corporation is a cooperative, organized and doing business under the laws of the

State of Georgia for the benefit of its members only, and not for profit. The existing lines of this corporation are located in the alleged territory of this complainant. The North Georgia Corporation is serving approximately 900 rural residents from 147 miles of rural transmission lines now completed, and will serve more rural customers in the future on these lines and approximately 172 miles of additional rural transmission lines which are now under construction; the said corporation is not serving electricity purchased from the Authority to any customers who are now or who have been customers of the said complainant, and the service furnished by this North Georgia Corporation constitutes new and additional service to rural residents not previously served. Prior to the beginning of operations by this North Georgia Corporation, this complainant had not provided or made available electric service to the residents of rural areas in which the North Georgia Corporation is operating; said rural areas were without electric service prior to the initiation of operations by said corporation, and for a long time prior to the efforts of said corporation said complainant failed to provide electric service, either because it was unprofitable or because complainant was not interested in providing such a service, notwithstanding frequent requests over a long period of years by residents for such service when there was no other agency selling electric energy to which residents could make application. The percentage of rural electrification in the territory of complainant prior to the creation of the defendant Tennessee Valley Authority was less than five per centum; such rural service as was rendered was almost wholly incidental to service to urban communities and consisted of tapping lines of low voltage primarily intended for service to urban communities. This complainant will suffer no damage from activities of this North Georgia Corporation in rendering service to these rural residents hitherto unserved by the complainant, and any alleged damage to this complainant from operations of this corporation or from the sale of power by the Authority at wholesale to said corporation is indirect, remote, speculative, conjectural and negligible.

[fol. 274] Defendants are informed and believe and allege that the complainant made no effort to sell electric power to the rural residents now served by this North Georgia Corporation or in the vicinity of the lines of this corpora-

tion, constructed or under construction, until this complainant learned of the definite steps taken by this corporation to furnish the service now undertaken or contemplated; not until this complainant knew that surveys were undertaken and substantial sums of money expended by this corporation or the organizers thereof in conducting surveys or in preparing for construction or operations did this complainant show any interest or desire to serve the customers now served by this corporation, or customers in the vicinity of the lines of this corporation constructed or under construction, or take any steps to supply the demands for electricity of the customers in areas served by this corporation; in all of the areas which said corporation is now serving or building lines to service, the residents had for many years been attempting without success to make arrangements for service from the complainant; any losses which complainant may suffer or acts which complainant may have done in serving, attempting to serve, or making service available to customers in areas served by this corporation were done or incurred and are due to the abandonment of its policy of refusing rural service except as an incident to urban service and to the construction of new rural transmission lines without regard to the profitability or feasibility thereof, but solely for the purpose of handicapping, obstructing, and embarrassing the operations of the North Georgia Corporation; any damage which complainant might suffer from operations of this corporation or sales of electric energy by the defendant Authority to this corporation or any other acts of Defendant Authority [fol. 275] are due to its own acts and provide no basis for this action.

Competition which may result in rural areas now or in the future served by this corporation is competition from this corporation and not from the defendant Authority; if this corporation has served, or does serve in the future, additional rural residents as customers which might otherwise be some time served by said complainant, the failure to obtain such customers will be due to acts of this corporation and not to acts of the defendant Authority.

(6) Service under said contract with the North Georgia Electric Membership Corporation has been in full compliance with the contract of January 4, 1934, between the complainant and defendant Authority; under the terms of

that contract the Authority agreed for the duration of the contract not to sell electric energy in the territory generally served by this complainant and other members of the commonwealth and Southern system, except that it was provided that the defendant Authority might sell electric energy in the territory served by this complainant and the other members of the Commonwealth and Southern system up to a demand of 2500 kw; all of the sales of power in the area of complainant and other members of the Commonwealth and Southern system exclusive of the areas in which the Commonwealth and Southern companies agreed to sell their electrical facilities to the defendant Authority, have not exceeded this limitation. Defendant Authority, by contract dated October 7, 1936, agreed to extend said contract of January 4, 1934, until February 3, 1937, and further agreed not to serve any customers of any of the Commonwealth and Southern companies signatory to the contract of January 4, 1934, including the complainant, nor any customer in the area served by any of such companies (whether or not a customer of any of said companies, including the complainant) except to the extent of service aggregating not more than 4000 kw. of demand, exclusive of the Monsanto Chemical Company; and this contract, which does not expire until February 3, 1937, in itself constitutes a complete and adequate protection to any right or interest which the complainant may have and is a bar to this suit.

(7) Defendant Authority is not now serving nor has it contracted to serve any customers in the alleged operating area of complainant, except as set out hereinabove, and the possibility of such future hypothetical service to additional customers in the alleged territory of the complainant or of injury to the complainant resulting from such possible service is remote, indirect, speculative, hypothetical and negligible.

While the Authority has received an inquiry from the City of Dalton with regard to the possible purchase of power by the city from the Authority for the operation of the city's municipally-owned electric distribution system, and representatives of the Authority have conferred with representatives of the city with regard thereto, such inquiry was in no way stimulated or solicited by the defendants or any of them, but was the wholly voluntary act of

the said city and such inquiry and discussions have not resulted in any contract for the sale of electric energy to the city nor has such sale been authorized by the defendant Authority; the Authority does not have transmission facilities at or near the said city which could be used for service to said City of Dalton and no such facilities are under construction or authorized by defendant Authority; and the possibility of damage to this complainant through the possible sale of power under any hypothetical contract is so remote that said negotiations do not present a subject for [fol. 277] controversy between this complainant and the defendants.

(8) This complainant is not affected or injured by sales of power by the Authority or related acts outside the complainant's territory and therefore cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 278] I. As to the complainant Alabama Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) The said complainant is a party to a contract with the defendant Tennessee Valley Authority dated January 4, 1934, the duration of which contract has been extended until February 3, 1937, by an agreement dated October 7, 1936. Pursuant to the terms of said contract of January 4, 1934, said complainant agreed to sell and convey and has sold and conveyed to the Tennessee Valley Authority for good and valuable considerations, to wit, the sum of \$1,150,000.00 and other good and valuable considerations, all of the said complainant's low tension transmission lines (44 kv or lower), and all of its rural transmission lines and substations in the Counties of Lauderdale, Colbert, Lawrence, Limestone, Morgan (exclusive of the Hulaco area), the north half of Franklin (including the Town of Red Bay), and the northern part of Cullman, together with all franchises, rights, powers, and privileges to use the properties sold and conveyed for the sale of electric energy in the areas served by the said properties, and together with all contracts for the sale of power served by said properties. The said complainant further agreed under the said

contract not to sell electricity in the areas served by the properties sold and conveyed to the Authority or in any area in which the said complainant did not own facilities for the generation, transmission, and distribution of electric energy at the date of the execution of said contract.

In the contract of January 4, 1934, this complainant did covenant and agree that after April 4, 1934, the Authority should have the right to sell electric energy to the respective [fol. 279] municipalities in the above described counties, and parts thereof, for use and for resale by said municipalities. The Authority has in fact proceeded to contract to serve certain municipalities in these counties, but it is presently serving under such contracts only the Cities of Athens, Florence and Muscle Shoals, Alabama. Each of said municipalities now buying electricity at wholesale from defendant Authority owns its own distribution system and distributes this electricity, and this complainant has no franchise and owns no distribution system in said municipalities. Said municipalities are not selling any of the electricity purchased from the defendant Authority under such contracts in competition with said complainant. Defendant Authority has been selling electricity under said contracts to the City of Athens, Alabama, for more than two years, and to the City of Muscle Shoals, Alabama, for more than three years. The complainant does not now have and has not had a franchise to do business within the limits of the City of Muscle Shoals, Alabama, nor has it ever sold power within said city either at wholesale or retail. The said complainant has never had a franchise to sell or sold power generally within the City of Athens, Alabama, and its franchise rights, if any, to sell power to certain industrial customers within the limits of Athens, Alabama, were conveyed to the defendant Authority under the contract of January 4, 1934, which contract was approved as to the said complainant in the case of Ashwander v. Tennessee Valley Authority hereinabove referred to. Pursuant to the provisions of the contract of January 4, 1934, in which the said complainant agreed to dispose of its municipal distribution properties and franchises and other rights appertaining thereto in said cities in northern Alabama to the respective municipalities, this complainant, on July 15, 1936, sold and conveyed its electric distribution properties to the City of Florence, Alabama, which has owned and [fol. 280] operated said properties since said date. The

said complainant does not now nor has it for many years had a franchise to do business within the limits of Florence, Alabama. Under said contract of January 4, 1934, the said complainant agreed not to sell electricity in the cities of northern Alabama above described in such portions of said area in which it disposed of its urban and rural transmission lines, and under said contract the said complainant cannot engage in the sale of electricity in the City of Florence, Alabama, without violating the covenants of the said contract.

The defendant Authority is also selling electricity to the City of Sheffield, Alabama, which is located in one of the counties referred to in the contract of January 4, 1934. Said City of Sheffield is using power purchased from defendant Authority only for municipal purposes such as street lighting and similar municipal functions. Said City of Sheffield is not reselling any of the power purchased from defendant Authority in competition with said complainant. Said complainant is and has been for many years without a franchise to sell electricity within the City of Sheffield. Complainant agreed in the contract of January 4, 1934, that the Authority shall have the right to serve the City of Sheffield as hereinabove more particularly set forth.

All existing contracts to sell electricity between the Authority and municipalities in Alabama or alleged territory of the complainant are with municipalities located in said counties referred to in the contract of January 4, 1934.

By the said contract of January 4, 1934, the said complainant agreed to sell and assign not only the transmission lines and rights hereinabove referred to, but also certain contracts with industrial customers directly served from substations conveyed. The Authority is now contracting with and/or selling electricity only to said industrial customers. The only industrial customers to whom the Authority is selling electricity, or with whom the Authority has contracted to sell electricity in Alabama or territory of this complainant, as described in the bill of complaint, are the industrial customers served from said substations and whose contracts were sold and assigned by said complainant. The covenant of the said contract of January 4, 1934, obligating the said complainant not to sell electricity in such portions of the counties

in Alabama described in said contract of January 4, 1934, in which it sold its electrical facilities, applies to the said industrial customers and the complainant cannot therefore sell electricity to such customers except in violation of the contract of January 4, 1934.

(3) The Authority is not now serving nor has it contracted to serve any customer whatsoever within the operating area of this complainant claimed by the bill, outside of the territory in the counties in Alabama referred to in the contract of January 4, 1934, except that it has contracted to sell and is selling electricity to the Cullman County Electric Membership Corporation.

The said complainant never has obtained and does not now have any county franchise to maintain and operate transmission or distribution lines for electric service in Cullman County.

The Cullman County electric Membership Corporation is a corporation organized under the laws of the State of Alabama as a non-profit membership corporation for the benefit of its members only. Said corporation is serving 525 rural residents off of approximately 138 miles of rural transmission lines. The said corporation has never been a customer of said complainant and is not selling energy purchased from the Authority to rural customers which have heretofore received service from said complainant. The [fol. 282] service furnished by this corporation constitutes new and additional service to rural residents not previously served. Under the terms of said contract of January 4, 1934, it was provided that the defendant Tennessee Valley Authority might sell electric energy in the territory served by this complainant and the other members of the Commonwealth and Southern system outside of the areas served by the lines complainant agreed to convey to the Tennessee Valley Authority up to a demand of 2,500 kw. All of the sales of power in the areas of complainant and other members of the commonwealth and Southern system, exclusive of the areas in which the Commonwealth and Southern companies agreed to sell their electrical facilities to the defendant Authority, including the sale of power to the Cullman County Electric Membership Corporation, have not exceeded this limitation.

The area served by the said corporation was without electric service prior to the initiation of operations by said

corporation, either because it was unprofitable or because it was not interested in providing such service, notwithstanding frequent requests over a long period of years by residents for such service when there was no other agency selling electric energy to which the residents could make application.

The percentage of rural electrification in the territory of complainant prior to the creation of the defendant Tennessee Valley Authority was less than five per centum; such rural service as was rendered was almost wholly incidental to service to urban communities and consisted of tapping lines of low voltage primarily intended for service to urban communities. This complainant will suffer no damage from activities of this North Georgia Corporation in rendering service to these rural residents hitherto unserved by the complainant. Any alleged damage to complainant from [fol. 283] operations of this corporation is indirect, remote, speculative, conjectural, and negligible.

Defendants are informed and believe, and therefore further allege that this complainant made no effort to sell electric power to the rural residents now served by this corporation or in the vicinity of lines owned by this corporation until the complainant had knowledge of the initiation of operations by this corporation looking to furnishing the service now undertaken or contemplated; that not until this complainant knew surveys were undertaken and substantial sums of money expended by said corporation or the organizers thereof in conducting surveys and preparing for constructions and operations did complainant show any interest or desire to serve the customers now served by such corporation or customers in the vicinity of lines of said corporation, or do any act directed toward supplying the demands for electricity of the customers in areas served by said corporation; that in all the areas which said corporation is now serving or in which it contemplates service the residents had for many years been attempting without success to make arrangements for service from the complainant; that any losses which complainant may suffer or acts which complainant may have done in serving, attempting to serve, or making service available to customers in areas served by said corporation, are due solely to the construction of new rural transmission lines without regard to the profitableness or feasibility thereof, but solely for the pur-

pose of handicapping, obstructing and embarrassing the operations of said corporation.

Competition which may result in rural areas now or in the future served by this corporation is competition from this corporation and not from the defendant Authority; if this corporation has served or does serve in the future additional [fol. 284] rural residents as customers which might otherwise be sometime served by said complainant, the failure to obtain such customers will be due to acts of this corporation and not to acts of the defendant Authority.

(4) The defendant Tennessee Valley Authority, by contract dated October 7, 1936, agreed to extend the contract of January 4, 1934, until February 3, 1937, and further agreed not to serve any customer of any of the Commonwealth and Southern companies signatory to the contract of January 4, 1934, including the complainant, nor any customer in the area served by any of such companies (whether or not a customer of any of said companies, including the complainant) except to the extent of service aggregating not more than 4,000 kw in demand, exclusive of the Monsanto Chemical Company. This contract, which does not expire until February 3, 1937, in itself constitutes a complete and adequate protection of any right or interest which the complainant may have and is a bar to this suit.

(5) The Authority is not now serving, nor has it contracted to serve, any customers whatsoever, nor has it authorized service to customers in the alleged operating territory of said complainant, except as set out hereinabove, and the possibility of future and hypothetical service to additional customers, or damage to the complainant resulting from such possible service, is remote, indirect, speculative, conjectural, and negligible, and does not constitute a basis for maintaining this action.

(6) The complainant is not affected or injured by sales of power by the Authority outside the complainant's territory, and therefore this complainant cannot complain of said sales of power by the Authority or other acts related thereto.

[fol. 285] (7) Defendants allege that said complainant is estopped to challenge the validity of the Tennessee Valley Authority Act or the acts of the defendants pursuant thereto for the reason that the said complainant has voluntarily ac-

accepted and received benefits under the Act and the acts of the defendants pursuant thereto, all in the respects challenged in the bill. In particular, defendants allege that said complainant is a party to a contract with the defendant Authority dated January 4, 1934, as hereinabove more particularly described, which contract has been extended by agreement dated October 7, 1936, until February 3, 1937. Under said contract of January 4, 1934, this complainant has purchased large quantities of electric energy from the defendant Authority and has thus recognized the legality of the generation and sale of such energy by the defendant Authority, and has thus relied upon the validity of the Act of Congress creating the defendant Authority, having knowingly received benefits under such Act and contract entered into pursuant thereto. Even before the execution of said contract, this complainant purchased large amounts of power from the defendant Authority. Thereafter said complainant purchased the following amounts of power supplied by the defendant Authority under said contract in the periods specified below:

Period	Estimated energy purchased by Alabama Power Company
January 4, 1934, to June 30, 1934.....	109,715,293 kwh.
Fiscal year ending June 30, 1935.....	464,520 kwh.
Fiscal year ending June 30, 1936.....	185,574,686 kwh.
July 1, 1936, through September 30, 1936..	160,000,000 kwh.

The said complainant is continuing to purchase large amounts of electric energy generated by the defendant Tennessee Valley Authority.

[fol. 286] During the present low-water period extending from June 1, 1936, to September 1, 1936, the company had need for and utilized very substantial blocks of power supplied by the defendant Authority, the amount purchased and relation to net system requirements of the complainant company being as follows:

Period	Energy supplied by defendant (kwh.)
June	20,285,600
July	55,526,900
August	50,281,700

During the present low-water season when a shortage of power existed among companies of the Commonwealth and

Southern system including this complainant, and when the demand of these companies for power from the Tennessee Valley Authority exceeded the amount that could be supplied by power generated at Wilson Dam before the construction and operation of Norris and Wheeler Dams, this complainant, together with the other companies of the Commonwealth and Southern system, for its own benefit and for the purpose of meeting the shortage of power, purchased, used and sold large quantities of power made available by the Tennessee Valley Authority, as set out in the preceding table, including power generated, and known by it to have been generated, at Norris and Wheeler Dams and increment of power made available, and known to have been made available, at Wilson Dam by the release of water by Norris Dam from the Norris Reservoir, and has continued to do so.

Under the said contract of January 4, 1934, the said complainant agreed to interchange power with the defendant Tennessee Valley Authority, Tennessee Valley Authority agreeing to deliver power to the complainant at Wilson Dam and other points at which power was needed by the complainant to serve its own customers, in exchange for an [fol. 287] equivalent amount of power delivered to the Authority at certain designated points to enable the Authority to serve its customers. The defendants allege that this interchange agreement has continuously been performed by the said complainant and the defendant Tennessee Valley Authority and that the said complainant has received and is still receiving the benefit of said interchange agreement.

Under the terms of said contract of January 4, 1934, the said complainant agreed to sell and convey and did sell and convey to the Tennessee Valley Authority certain properties for the transmission and distribution of electric energy, more particularly described above, with full knowledge that these properties were to be used by the Tennessee Valley Authority for the sale of electric energy. Under the same contract the said complainant agreed to sell and convey and did sell and convey to the Tennessee Valley Authority certain lands at the present site of the Wheeler Dam, with full knowledge that the Tennessee Valley Authority intended to construct and maintain the Wheeler Dam and reservoir upon these lands. The said complainant has received good and valuable consideration for the conveyance of said properties.

Under said contract of January 4, 1934, the complainant Alabama Power Company agreed to supply the power required by the Authority for the construction of Guntersville Dam by the defendant Authority in return for the receipt at Wilson Dam, Alabama, of equivalent amounts of power from the Authority; pursuant to said contract, the company has delivered under this arrangement, and is still delivering, large amounts of power which the company knew, and has at all times known, to be essential to the construction of the said Guntersville Dam, and that such power was specifically intended to be used for such purpose; upon request of the Authority and on its account the company constructed a transmission line for service to the Authority in the construction of Guntersville Dam and for the supplying of power for said construction, as set out above, and has knowingly supplied all the electricity needed for the construction of said dam, and has received the benefits of said agreement.

(8) Heretofore and before the complainant Alabama Power Company filed the present bill in the Chancery Court of Knox County, to wit, on September 13, 1934, certain stockholders of the Alabama Power Company brought a suit against the defendants in the Circuit Court for the Eighth Judicial Circuit of Alabama, which suit was removed to the Federal District Court for the Northern Judicial District of Alabama on motion of the defendants. The stockholders claimed to sue on behalf of and in the right of the Alabama Power Company. The object of said suit was to enjoin the transfer by the Power Company to the Authority of certain transmission lines and other properties under a contract of January 4, 1934, upon the ground that the contract was in furtherance of an alleged illegal and unlawful power program of the defendants. The bill further sought to have adjudged invalid the alleged power program of the defendants in its entirety. The said suit involved many of the same matters, issues and demands, and prayed for similar broad relief, as the complainant Alabama Power Company does by the present bill, to a large extent, demand and set forth; that is to say, the complainants in the said suit alleged:

That the so-called "power program" is a part of the national power policy first conceived in speeches of the present Chief Executive made during a Presidential campaign;

that the Tennessee Valley Authority Act providing for the alleged "power program" was enacted by the Congress as part of this national policy and that the primary purpose [fol. 289] of said Act was to provide for the production of electric energy; that pursuant to said Act the defendants have promulgated a "power program," described in terms of speeches and announcements of officials of the Authority; that the acknowledged objectives of such program are the establishment of public ownership of utilities in a large area of the nation, the promotion of domestic and rural use of electricity at the expense of industrial use, the regulation of intrastate rates and the establishment of a yardstick to measure the reasonableness of rates; that the Act authorizes the Authority to develop and that it is planning to develop all potential water power sites on the Tennessee River and its tributaries and to generate and distribute the power produced at such sites; that the Authority is illegally engaged in "programs for economic and social development" and "experiments in social and economic planning"; that its program has no real or substantial relation to the improvement of navigation and that if it is sought to be justified as such, it is a "sham and pretense"; that the Authority had done or immediately threatened to do certain acts in execution of the alleged program, particularly the following: the construction of hydroelectric dams; the construction and operation of an interconnected network of transmission lines within transmission distance of all the dams; the purchase, financing and promotion of the purchase by others of local distribution systems for the disposition of electricity generated by the Tennessee Valley Authority either directly or in concert with the Public Works Administration; the execution of contracts for the supply of electric energy to various municipalities and other customers, including the fixing of resale rates by the terms of such contracts; the conduct of a systematic campaign of propaganda, solicitation and local political activity in the area in question; the forwarding of bills designed [fol. 290] to promote the "power program" to the legislatures of the various states and lobbying directly or through their agents for the passage of such bills; the use of the Electric Home and Farm Authority, Inc., to further the same program; and the solicitation of customers of the complainants by offers to supply electricity at arbitrary,

confiscatory, and discriminatory rates, unfair competition, and inducements to breach existing contracts.

The bill prayed that the contract of January 4, 1934, be adjudged invalid as in aid of the alleged illegal power program, and further, that the alleged power program be adjudged invalid in its entirety and that the defendants be enjoined from doing or threatening to do any and all acts in furtherance thereof.

The District Court ruled that the plaintiff stockholders were entitled to bring suit on behalf of and in the right of the Alabama Power Company upon the refusal of the Alabama Power Company to do so, and on the merits held that the contract was invalid and beyond the lawful powers of the Authority. The District Court limited relief to the annulment of the contract of January 4, 1934, as it related to the Alabama Power Company, and refused to grant a declaratory decree or other relief as to any other matter complained of. The trial court ruled, however, that the validity of the contract of January 4, 1934, must be determined by its relation to the so-called "power program." The trial court admitted evidence and made full findings that:

The Authority very early in 1933 promulgated a power program and policy for the promotion of an independent, Government-owned electric utility system without limitation to the power legitimately produced at Muscle Shoals or other increase of electricity lawfully produced elsewhere; [fol. 291] the objectives and purposes of the power program were to establish a national yardstick as to the cost of generation, transmission, and distribution, to supplement inadequate state regulation by competition, to promote public ownership of utility systems and to discriminate against industrial and commercial users of electricity in favor of rural and domestic users; in the execution of this program the Authority was attempting to exercise exclusive control over all 149 power sites in the Tennessee River system; the Authority was constructing Norris, Wheeler and Pickwick Dams with provision for installation of generating facilities; the Authority intended to combine the power produced at all dams into one pool by interconnection of all transmission lines into an independent system and had begun the construction of the Norris-Wheeler-Wilson

transmission line, the Authority's power system included all back-up and stand-by facilities necessary for an independent commercial system and the Authority had acquired and was operating independent *diesel* and steam plants, the power program necessarily included rural distribution systems, the Authority's program contemplated immediately the service of the area served by the lines to be conveyed by the several power companies under the contract of January 4, 1934, and the Authority had executed contracts with numerous municipalities and utilities, including the Cities of Knoxville and Pulaski in Tennessee, the City of Tupelo and several non-profit associations in north-eastern Mississippi, Cities of Athens, Florence, Sheffield, Tuscumbia, and others in Alabama, all of which contracts provided for complete control of resale rates and accounting methods by the Authority; the Authority was actively engaged in constructing and extending its own rural lines in Mississippi and Alabama; the power produced by the Authority could be marketed only by displacing the existing utilities; in order to find an outlet for its power, the Authority was attempting to purchase existing facilities of private utilities, or if private utilities refused to sell, to finance the acquisition of competing plants in cooperation with PWA; the Authority organized and used EHFA to finance electric appliances and engaged in extensive sales promotional activities in order to dispose of its power; and that the contract of January 4, 1934, between the Alabama Power Company and the Authority was "a substantial means and part in the power program herein outlined."

[fol. 292] From the decree enjoining the performance of the contract, the defendants appealed. The complainants filed a cross appeal from the action of the court denying the prayer for declaratory relief. On this cross appeal and on all appellate proceedings, complainant joined in the request for the relief sought by the stockholders against the Authority.

The Circuit Court of Appeals permitted the plaintiff stockholders to sue on behalf of and in the right of the Alabama Power Company and to assert any right or claim which the Alabama Power Company could have asserted. The Circuit Court of Appeals reversed the judgment of the District Court. The court held that the only issue which the complainants were entitled to raise was the validity of

the contract of January 4, 1934, as it related to the Alabama Power Company, and that the validity of said contract was to be determined on its own merits and without regard to the so-called "power program" of the defendants.

Upon the application of the complainants, the Supreme Court granted certiorari to review the judgment of the Circuit Court of Appeals. The Supreme Court sustained the right of the stockholders to maintain the suit on behalf of and in the right of the Alabama Power Company and to prosecute any right or claim which the Alabama Power Company could have asserted. The Supreme Court affirmed the judgment below and expressly held that the sole issue which the complainants were entitled to raise was the validity of the contract of January 4, 1934, as it related to the Alabama Power Company, and that the validity of said contract must be determined on its own merits and without regard to the so-called "power program" of the defendants. Upon the filing of the mandate of the Supreme Court in the District Court for the Northern Judicial District of Alabama, the District Judge entered a decree adjudging the contract of January 4, 1934, valid as it related to the [fol. 293] Alabama Power Company, and refused to grant leave to the complainants to file a so-called amended or supplemental bill challenging anew the alleged power program of the defendants.

Notwithstanding the decision of the Supreme Court in the former suit, the same allegations respecting the alleged "power program" and the same issues and demands with respect thereto are made again in this bill by and on behalf of the Alabama Power Company.

The statement of the allegations made, issues created, the proof and findings of the trial court, the holding of the District Court, the Circuit Court of Appeals and the Supreme Court, and the final decree entered by the District Judge in said former suit will be substantiated by reference to the record and opinions rendered therein, the record being hereto attached as Exhibit "K" and made a part hereof.

Therefore, defendants plead said former suit, proceedings and adjudication in bar of the averments and claims advanced by the complainant Alabama Power Company in the present bill to the effect that the Alabama Power Company may challenge the validity of the power program al-

leged to be authorized by the Act or promulgated by the defendants, or that complainant Alabama Power Company may challenge the validity of any act or acts of the defendants except such particular act or acts of a definite and concrete character which actually interfere or threaten to interfere with the rights of the Alabama Power Company, or that the said complainants may place in issue the validity of said alleged power program or programs as bearing on the validity of any particular, definite transaction actually interfering or threatening to interfere with the rights of the complainants.

[fol. 294] J. As to the complainant Mississippi Power and Light Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer:

(2) Defendant Authority is not in fact selling electricity nor has it contracted to sell electricity to any customer within the operating territory of the complainant, nor is any wholesale purchaser of power from the defendant Authority in fact selling, or under contract to sell, electricity within the operating territory of the complainant. Defendants admit, however, that they have a contract with, and are selling, electricity to the City of Holly Springs, in Marshall County, Mississippi, which appears to be within the claimed operating territory of complainant but defendants allege that said City of Holly Springs is not in fact within the operating territory of said complainant. The City of Holly Springs is not selling electricity at retail to rural residents within the operating territory of said complainant.

At and prior to the date of the contract with defendant Authority for the sale of power and the date of receiving service under said contract, and for a long time prior to the enactment of the Tennessee Valley Authority Act, the City of Holly Springs owned its own generating and distribution facilities, and generated and distributed electric energy to all those desiring electric service in said municipality; the City of Holly Springs was not, and has never been, a customer of this complainant. The complainant has no franchise or electric facilities and is not rendering service in the City of Holly Springs. Sales of electric energy

by the Authority to this municipality do not injure the complainant; if said sales result in injury to complainant it is remote, indirect, speculative, conjectural and negligible.

[fol. 295] (3) Defendant Authority is not now serving, nor has it contracted to serve, any customers whatsoever within the operating territory of complainant as described by the bill, except that it has contracted to and is serving the City of Holly Springs, as hereinabove set forth, and the possibility of future and hypothetical service to additional customers in the alleged area of the complainant or of injury to the complainant resulting from such possible service is remote, indirect, speculative, conjectural and negligible.

(4) This complainant is not affected or injured by sales of power by the Authority or related acts outside the complainant's territory and, therefore, cannot complain of such sales of power by the Authority or acts related thereto.

[fol. 296] K. As to the complainant Southern Tennessee Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) This complainant is a wholly-owned subsidiary of the Commonwealth and Southern Corporation or wholly-owned subsidiaries thereof, and it was organized solely to own that portion of the Tennessee Electric Power Company high tension transmission line between Wilson Dam, Alabama, and Nashville, Tennessee as lies within the State of Alabama; the said complainant does not operate the said line but has leased said line to the Tennessee Electric Power Company; the said complainant does not engage in the generation, transmission, distribution, purchase or sale of electric power except as set out above; it was created and is acting as an agency and instrumentality of the complainant Tennessee Electric Power Company, and, therefore, each and every defense alleged as to the said complainant Tennessee Electric Power Company is applicable to the said complainant Southern Tennessee Power Company and is hereby realleged and relied upon as to the said complainant Southern Tennessee Power Company.

(3) The activities of the defendant Authority have not resulted in an injury or threat of injury to this complainant that is not so speculative, conjectural, remote, and indirect as to provide no basis for the maintenance of this suit by said complainant; but, on the contrary, the gross annual revenue of complainant, which is due wholly from the use of the high tension transmission line hereinabove referred to, in the years since the defendant Authority initiated operations under the Tennessee Valley Authority Act has substantially exceeded the gross revenues prior to the passage [fol. 297] of the Tennessee Valley Authority Act and the initiation of operations thereunder by the defendant Authority, and the revenues have increased each year. The Authority is not competing, and has no contracts which will or can result in competition, with the said complainant, or in direct or substantial injury to said complainant.

L. As to the complainant Appalachian Electric Power Company, the defendants allege the following additional and separate defenses:

(1) The defendants reallege and rely upon each and every allegation of Part I of this answer.

(2) The sole basis for claim of actual or threatened injury on the part of this complainant is the fact that it owns certain properties located within a radius of 250 miles of some dam under construction or which the bill alleges may be constructed by the defendants, which properties are used for generation, transmission, distribution and/or sale of electric energy. The Authority is not now, and has never, constructed or authorized the construction of transmission lines, dams, power houses, or any other facilities used or useful for the generation, transmission, or sale of electricity in or anywhere near the property or the territory of the said complainant as alleged in the bill; nor does it now, or has it ever, owned any such properties in said alleged territory. It has not sold and is not selling, nor has it contracted to sell or authorized the sale of electricity in any part of the alleged territory. Any alleged injury or damage, actual or threatened, to this complainant from alleged operations by the Authority is indirect, remote, speculative, conjectural, hypothetical, and negligible. This complainant is not affected or injured by sales of power by the [fol. 298] Authority or related acts outside the complain-

ant's territory, and, therefore, cannot complain of such sales of power by the Authority or acts related thereto.

M. As to the complainant Holston River Electric Company, the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

N. As to the complainant East Tennessee Light & Power Company, the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

O. As to the complainant Tennessee Eastern Electric Company, the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

P. As to the complainant Kingsport Utilities, Incorporated, the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

[fol. 299] Q. As to the complainant Kentucky-West Virginia Power Company, Inc., the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

B. As to the complainant Carolina Power & Light Company, the defendants allege the following additional and separate defenses:

(1) Defendants reallege and rely upon each and every allegation appearing in Part I of this answer and incorporate by reference the full and complete text of paragraph (2) of subdivision L of Part II of this answer, except that defendants allege that there is now under construction in the alleged territory of this complainant, a high tension transmission line from the Santeeelah Dam of the Aluminum Company of America to the site of the Hiwassee Dam on the Hiwassee River, which transmission line has been constructed solely in order to enable the Authority to secure power for the construction of the Hiwassee Dam by the Authority, but in fact said transmission line as projected is not located in whole or in part within the operating territory of the said complainant. The Authority has not authorized the use of said line for any other purpose than that hereinabove recited. Any alleged damage to this complainant resulting from the construction of this line is remote, indirect, hypothetical, speculative, and negligible.

[fol. 300] **S. As to the complainant Franklin Power & Light Company, the defendants allege the following additional and separate defenses:**

(1) Defendants reallege and rely upon each and every allegation of Part I of this answer and incorporate by reference the full and complete text of paragraph (2) in subdivision L of Part II of this answer.

[fol. 301]

Part III

For further answer to said bill of complaint the defendants hereby interpose the following legal defenses appearing upon the face of the bill, as authorized by the statutes and equity rules:

1. This Court is without jurisdiction over this action.

(a) Under the laws of the State of Tennessee this case was not within the jurisdiction of the Chancery Court of Knox County, Tennessee, from which it was removed.

(b) Under Section 8(a) of the Tennessee Valley Authority Act the jurisdiction of cases of this character is limited to the Northern Judicial District of Alabama.

2. The bill of complaint is without equity and the allegations thereof are not sufficient to establish a cause of action on behalf of the complainants, or any of them.

3. The allegations of the bill of complaint are not sufficient to show that the complainants or any of them have sufficient legal interest in the subject matter of the suit to entitle them to maintain this action.

4. The sale or contracts for sale of electric energy to competitors of complainants, or any of them, does not constitute legal injury and affords no ground of complaint to any complainant.

5. The allegations of the bill of complaint are not sufficient to establish the right of the complainants or any of them to maintain this suit in their capacity as federal, state, or local taxpayers.

[fol. 302] 6. The allegations of the bill of complaint are not sufficient to establish the right of the complainants, or any of them, to maintain this suit in their capacity as franchise holders or property owners.

7. The allegations of the bill of complaint are not sufficient to show any immediate threat of definite irreparable injury to the complainants, or any of them, resulting from definite, concrete acts of the defendants, but on the contrary the allegations relating to injury are remote, speculative, and contingent.

8. It affirmatively appears from the allegations of the bill of complaint that Harold L. Ickes, Administrator of the Federal Emergency Administration of Public Works, is a necessary and indispensable party to this action and that since he has not been joined as a party defendant the bill of complaint is fatally defective for non-joinder.

9. It affirmatively appears from the allegations of the bill of complaint that the various municipalities alleged to have entered into contracts for the purchase of electricity from the Tennessee Valley Authority and the various unnamed parties, including cooperative organizations and industrial customers, also alleged to have entered into such contracts, which contracts are alleged to be illegal and void,

are all necessary and indispensable parties defendant to this suit, and that since said parties have not been joined the bill of complaint is fatally defective for non-joinder.

10. The bill is fatally defective as a pleading for the reason that it is so filled with political propaganda and con-[fol. 303] fusing allegations of remote and speculative contingencies that it is unintelligible.

11. The bill is fatally defective because the allegations are so vague, indefinite, and general as not to inform the defendants of the nature of the cause of action that they are called upon to defend.

12. The bill is fatally defective because the allegations are argumentative, evidentiary, and impertinent, and as such are in violation of the equity rules.

13. The allegations of the bill of complaint do not set forth any definite and concrete acts threatened or performed by the defendants which will result in direct and immediate interference with any legal rights or complainants.

14. The bill cannot be maintained in its present form for the reason that the allegations thereof respecting the alleged "power program" do not present a justiciable controversy as to the complainants, considered severally or as a class, and the bill does not purport to allege any cause of action of a definite and concrete character, threatening to interfere with the rights of any particular complainant.

15. The bill is too vague, indefinite, and confusing to admit of judicial determination.

16. It affirmatively appears from the allegations of the bill of complaint that the complainants are attempting to obtain a decision on abstract and hypothetical questions as to the possible rights of the parties in various contingencies not involving a present specific controversy.

[fol. 304] 17. The bill fails to allege sufficiently the character, extent, and immediacy of the injury inflicted or threatened to be inflicted upon the complainants by any acts of the defendants, and the manner in which such injury will be caused.

18. The bill is multifarious because of a misjoinder of parties complainant.

19. The bill is multifarious because of a misjoinder of causes of action.

20. It appears from the allegations of said bill of complaint that there is no joint cause of action in which each of the complainants has a legal interest.

21. It appears from the allegations of said bill of complaint that there is no one justiciable controversy existing between all of the complainants on one side and the defendants on the other. If any justiciable controversies have been alleged, they are separate and distinct and are not properly joined in this suit. If any justiciable controversies have been alleged, parties having no interest therein have been improperly joined as complainants.

22. It affirmatively appears from the allegations of said bill of complaint that the complainants are attempting to obtain a sweeping declaratory judgment to determine the validity of an alleged national program upon vague and indefinite allegations without a sufficient showing of actual or threatened overt acts inflicting injury upon each of the complainants.

[fol. 305] Wherefore, having fully answered the said bill of complaint, the defendants pray that an order be entered herein dismissing said cause as to each and all of the said complainants, with costs.

(S.) James Lawrence Fly, John Lord O'Brian, William C. Fitts, Jr., Solicitors for the Defendants
Tennessee Valley Authority, Arthur E. Morgan,
Harcourt A. Morgan, David E. Lilienthal.

Duly sworn to by James Lawrence Fly. Jurat omitted in printing.

[fol. 306] RECITAL AS TO EXHIBITS TO ANSWER

All exhibits attached to the answer of the defendants are omitted, except Exhibits "A" and "K".

Exhibit "A" attached to answer to the original bill of complaint is the same as Complainants' Exhibit No. 328, being a copy of the Report to Congress by TVA on the Unified Development of the Tennessee River System, dated

March, 1936, and is here omitted since Complainants' Exhibit No. 328 is transmitted as an original exhibit.

Exhibit "K" attached to the answer to the original bill of complaint is a copy of the printed record in the case of Tennessee Valley Authority, et al., vs. Ashwander, et al., and is transmitted as an original exhibit.

[fol. 307] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MEMORANDUM OPINION ON APPLICATION FOR TEMPORARY
INJUNCTION—Filed December 22, 1936

The bill makes an attack on the constitutionality of the Tennessee Valley Authority Act on fundamental grounds that are elaborately pleaded and vigorously urged at the bar, and it is earnestly insisted that the power program authorized by the Act transcends the power of Congress; it is insisted that the individual defendants, who are the directors of defendant corporation, misconceive the length to which they may lawfully go under the Act, and that they are exercising powers not conferred by the Act in executing the present program, to the very great and irreparable damage to complainants and their properties.

These allegations raise grave issues, both of law and fact, which cannot properly be determined upon a hearing of this kind.

The rule by which courts will be governed upon hearings of this nature are plainly stated by the text writers and the authorities. It makes it the duty of the Court to balance the equities if possible, upon the proofs submitted and do justice to all concerned.

If, from the allegations of the bill and averments of the answer, and the proof, the Court is in doubt as to the constitutionality of the Statute, and it appears just, the injunction will issue, otherwise it will not, or, if it appears that doubtful questions of law or fact are involved, the injunction will issue, if necessary to preserve the status of the parties and the injunction will issue if the injury to the moving party will be certain, immediate or great, if denied, or loss of inconvenience to the opposing party will be comparatively small and insignificant if granted.

The affidavits presented by both sides of this litigation show that a very active competition exists between complainants, some, at least, and the Tennessee Valley Authority. They show that both the complainants, or some of them, and the Tennessee Valley Authority are actively soliciting the other's business; each trying to influence customers not to contract for electric service with the other; they are building parallel transmission lines; the defendant admits that it is building distribution lines in and through territory served by some of the complainants, that in some instances these lines are duplication of the lines now in the service of the complainants.

It is shown that defendant is actively engaged in enlarging [fol. 308] its service over a wide area now occupied by complainants, or some of them; that since August 19 last, it has erected one thousand miles of high tension transmission and distribution lines. Some of these lines are intended to aid the Government in constructing dams now under construction.

Defendants show by their affidavits, that it has not accelerated its construction work since notice of the application for temporary injunction in August last.

Balancing the equities between the parties as best I can, and following the rule announced by the text writers and the decisions, I am constrained to grant the temporary restraining order, restraining the defendants from further enlarging or extending their facilities for the transmission, distribution or sale of electric energy; from soliciting present, or potential customers of complainants and from negotiating contracts with present or potential customers of complainants. By this injunction is not meant to disturb the relations existing between the defendant and its customers as of this date, and it will be permitted to continue to furnish electric energy to its present customers, but it will not enlarge its facilities, or take on new customers.

The defendant will be permitted to complete its transmission lines and sub-stations now under construction as shown by the affidavit of A. H. Sullivan and W. W. Woodruff, presented to the Court by defendants, on December 12. I am unable to see where the completion of this equipment will very materially, if any, add to the damages, if any, already sustained by complainants. The affidavit above referred to shows that two of the projects are 95% completed; three are 90% completed; one is 85% completed; one 70%

completed; and two 10% completed. Defendants are in possession of, or have contracted for, materials necessary to complete these lines and sub-stations, and to enjoin further work on them would result of laying off many laborers now at work on the projects. I think so far as this work is concerned, the equities are with the defendants and that a greater injury would result to it by granting an injunction, than will result to the complainants by refusing it.

The injunction will not interfere with defendant's operation in the territory ceded to it by agreement of January 4, 1934, nor will it prevent other customers from tying onto rural lines now erected and being used by rural electric membership corporations.

This injunction to be in force until further orders of the Court.

This December 14, 1936.

(S.) Gore, Judge.

[fol. 309] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER FIXING TIME FOR TAKING DEPOSITIONS—Filed January 19, 1937

In this cause by consent of the parties it is agreed that the time for the taking and filing of depositions by both parties shall not (as provided in Equity Rule 47) be computed from the date of the filing of the defendants' answer, but shall be computed from March 1, 1937. Said equity rule shall govern in all other respects, including the right of the defendants to take and file depositions at any time within thirty (30) days from the expiration of the time herein provided for the taking and filing of plaintiffs' depositions, and it is so ordered, adjudged and decreed.

Approved for entry.

Gore, Judge.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants.
William C. Fitts, Jr., Solicitor for Defendants.

[fol. 310] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER FIXING TIME FOR TAKING DEPOSITIONS—Filed March 19, 1937

In this cause by consent of the parties, it is agreed that the time for the taking and filing of depositions by both parties shall not (as provided in Equity Rule 47) be computed from the date of the filing of the defendants' answer, but shall be computed from May 1, 1937. Said equity rule shall govern in all other respects, including the right of the defendants to take and file depositions at any time within thirty (30) days from the expiration of the time herein provided for the taking and filing of plaintiffs' depositions, and it is so ordered, adjudged and decreed.

Approved for entry.

(S.) Gore, Judge.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants.
James Lawrence Fly, Solicitor for Defendants.

[fol. 311] IN UNITED STATES DISTRICT COURT

(Caption omitted)

DEFENDANTS' MOTION TO STRIKE PORTIONS OF BILL OF COMPLAINT*—Filed June 14, 1937

Now come the defendants, Tennessee Valley Authority, et al., by their attorneys, and move the Court to strike from the bill of complaint herein the following specified portions of said bill, this motion being directed separately and severally to each portion so specified upon the grounds that the said parts of the bill, and each of them, are impertinent, im-

* This motion does not apply, of course, to the Alabama Power Company and the Georgia Power Company, former complainants in this cause.

material, evidentiary, and argumentative and are not proper pleading:

1. The whole of section III.
2. The whole of section IX.
3. The whole of section X.
4. The whole of section XII.
5. The whole of section XIII.
6. The fourth paragraph of section XV beginning "The acknowledged objects", and ending "within selected area."
7. Subsections (24), (25), (26), (27), (28), and (29) of section XVII.
8. The first two paragraphs of section XVIII.
9. The whole of section XIX.
10. The whole of section XX.
11. The whole of section XXI.
12. The whole of section XXII.
13. The whole of section XXIII.
14. The whole of exhibits "C", "D" and "E".

The failure to strike these allegations will result in the trial of many improper issues, and will seriously prejudice the defendants in the preparation of their defense and in the conduct of the trial.

Respectfully submitted, James Lawrence Fly, General Counsel, Tennessee Valley Authority; John Lord O'Brian, Special Counsel, Tennessee Valley Authority; William C. Fitts, Jr., Solicitor, Tennessee Valley Authority, Solicitors for defendants.

[fol. 312] IN UNITED STATES DISTRICT COURT
(Caption omitted)

DEFENDANTS' MOTION FOR BILL OF PARTICULARS *—Filed
June 14, 1937

Now come the defendants by their solicitors and move the Court that an order be entered herein requiring complainants to furnish further and better particulars with regard to the bill of complaint in the following respects:

* This motion does not apply, of course, to the Alabama Power Company and the Georgia Power Company, former complainants in this cause.

1

a. Copies of and a statement of the terms, conditions, and duration of each and every right, power, franchise, and privilege of each and every complainant under the laws of any State or political subdivision thereof, referred to in the first paragraph of section VII of the bill of complaint.

b. A statement as to whether and to what extent the conditions precedent to such rights, powers, privileges, and franchises have been complied with by such complainants.

c. Copies of and a statement of the terms, conditions, and duration of each and every long-term agreement of each and every complainant referred to in the second paragraph of section VII of the bill, and the name and location of each customer under such long-term contract referred to therein.

2

A statement showing accurately the location, type, and dependable capacity of each generating plant, transmission and distribution facility, identified as to each complainant, referred to in section VIII of the bill and purported to be shown in exhibit A thereto.

3

A copy and a statement of the terms of (a) "the right and privilege" of the Tennessee Electric Power Company referred to in the fourth paragraph of section VIII of the bill, and (b) "the agreement and understanding" of the Carolina Power & Light Company with the Federal Government referred to in the eighteenth paragraph of the same section.

4

A copy and a statement of the terms, conditions, and date of the deed from The Tennessee Electric Power Company to the United States, referred to in the second paragraph of section VIII of the bill.

5

A copy and a statement of the terms, conditions, and duration of the lease between The Tennessee Electric Power Company and the Southern Tennessee Power Company referred to in the eighth paragraph of section VIII of the bill.

A description of each activity of the defendants intended to be included in the general allegation of section XXIV of the bill as in excess of statutory authority.

In the event that section XXI of the bill is not stricken pursuant to defendants' motion concurrently made for that purpose, defendants move that complainants be required to furnish particulars setting forth a copy of each representation referred to in such section, the date thereof, the name of the person making it, and the occasion on which such representation was made, and a copy and description of any misrepresentation of any rate of any individual complainant.

The allegations concerning which particulars are requested are in such terms as not to inform the defendants of the issues they are called upon to defend, and the particulars herein requested are necessary in order to clarify the issues and to avoid prejudice to the defendants in the preparation for trial and the conduct of the defense in this case.

Respectfully submitted, James Lawrence Fly, General Counsel, Tennessee Valley Authority; John Lord O'Brian, Special Counsel, Tennessee Valley Authority; William C. Fitts, Jr., Solicitor, Tennessee Valley Authority, Solicitors for Defendants.

[fol. 314] [File endorsement omitted]

IN UNITED STATES CIRCUIT COURT OF APPEALS, SIXTH
CIRCUIT

No. 7606

TENNESSEE VALLEY AUTHORITY et al., Appellants,

v.

THE TENNESSEE ELECTRIC POWER Co., et al., Appellees

Appeal from the United States District Court for the
Eastern District of Tennessee, Northern Division

Decided May 14, 1937

Before Moorman, Simons, and Allen, Circuit Judges

OPINION—Filed May 14, 1937

SIMONS, Circuit Judge:

Nineteen corporations in the business of generating, transmitting and distributing electric energy as public utilities in the area within and contiguous to the Tennessee river basin commenced a suit in the Chancery Court at Knoxville, Tennessee, against the Tennessee Valley Authority, a corporation organized under special act of Congress, and the three directors of that corporation, to restrain acts being performed or threatened under powers claimed to be conferred by the TVA Act. They allege such acts to be either unauthorized or conferred by an unconstitutional grant of power. The suit was removed by the defendants to the United States District Court for the Eastern District of Tennessee. There a temporary injunction was granted, and the appeal is from the interlocutory decree. The Georgia Power Company, one of the plaintiffs, being restrained by an injunctive order subsequently issued out of the District Court for the Northern District of Georgia, and the Alabama Power Company, another, similarly restrained by the District Court for the Northern District of Alabama, [fol. 314-1] withdraw their support of the decree, but the remaining plaintiffs defend it.

The bill charges the defendants with having promulgated a program for the construction, development and operation of a great Federally owned and operated public utility sys-

tem for the generation, transmission and distribution of electricity, in all territory within physical transmission distance of the electric generating plants to be constructed under such program. It charges that with or without the authority of the act they contemplate construction of generating plants at 149 power sites on the Tennessee river and its tributaries, the construction of transmission and distribution lines to gridiron the entire area within 250 miles of such plants; that they plan to produce an amount of electric energy greatly exceeding the total consumption of the area, which includes all of the State of Tennessee and a large part of the six neighboring states. It charges that the execution of this program will irreparably injure if not wholly destroy the business and property of each of the plaintiffs, and that the defendants have already performed or are in process of performing a vast number of acts in the execution of their power program, which is being carried out as rapidly as possible. It charges the program itself, and all of the acts done pursuant to it to be unconstitutional and void, and that if the TVA Act purports to authorize such program, it is to that extent also unconstitutional and void. The defendants first challenged the jurisdiction of the court by motion to quash service of the subpoena, and later the sufficiency of the bill by a motion to dismiss. Upon the overruling of both motions they answered, denying the material allegations of the bill and challenging by supporting affidavits the right of the plaintiffs to either permanent or temporary relief. Their appeal not only assails the preliminary injunction, but brings up the jurisdictional and procedural questions decided against them below.

Jurisdiction must, of course, be first examined. The Tennessee Valley Authority is a public agency. By the terms of the statute creating it, its domicile is in Alabama. Therefore it is asserted that under the laws of Tennessee actions [fol. 314-2] against it are local and not transitory, and may be brought only in a court of competent jurisdiction at the place of its domicile, and this notwithstanding the fact that the bill charges lack of legal or constitutional authority for acts being or threatened to be performed in Tennessee.

Section 4, of the Tennessee Valley Authority Act, specifically provides that the corporation may sue and be sued in its corporate name. This provision is without qualification. Section 8 (a) is as follows:

"The Corporation shall maintain its principal office in the immediate vicinity of Muscle Shoals, Alabama. The Corporation shall be held to be an inhabitant and resident of the Northern Judicial District of Alabama within the meaning of the laws of the United States relative to the venue of civil suits."

The laws relating to venue of civil suits are well understood, particularly since the clarification of their interpretation in *Lee v. Chesapeake & Ohio Ry. Co.*, 260 U. S. 653. The present suit was begun in a state court of Tennessee. Under the authority of § 28 of the Judicial Code it was removed to that United States district court within the jurisdiction of which the state court action was pending. Whether a suit may be removed depends upon whether it could have been brought originally in the Federal district courts, which by § 24 of the Judicial Code, so far as applicable, have original jurisdiction of all suits of a civil nature, at common law or in equity, which arise under the Constitution or laws of the United States. This being such a case, it could have been brought originally in a Federal court. The test of removability is not whether the suit could have been brought in the particular district to which it was removed, but whether it could have been brought at all in a Federal district court. The venue of such suit after removal is not the district in which it might have originally been brought, but is the district in which the case is pending, for the right to remove is a personal privilege of the defendant, which he may assert or may waive. *General Investment Co. v. Lake Shore & Michigan Southern Ry. Co.*, 260 U. S. 245, 275. No question of Federal jurisdiction [fol. 314-3] here arises by virtue of § 8 (a) of the TVA Act, and the laws in respect to venue.

But while venue is waived by removal of a cause from a State into a Federal court, want of jurisdiction in the State court is not cured thereby, but may be asserted after removal is consummated. *Lambert Run Coal Co. v. Baltimore & Ohio R. R. Co.*, 258 U. S. 377; *Cain v. Commercial Publishing Co.*, 232 U. S. 124, 131; *General Investment Co. v. Lake Shore Ry.*, *supra*, 288. It is first urged on behalf of the appellants that they may not be sued in Tennessee because no local statute specifically authorizes suit against a public agency. Section 8676, Shannon's Code, however, provides

that any corporation claiming existence under the laws of the United States is subject to suit in Tennessee to the same extent as are local corporations. Denial of the applicability of this statute, based upon the rule that statutes which refer to corporations in general terms do not apply to public agencies, is not persuasive, for the Tennessee statute speaks not in general terms but with precision.

The principal challenge, however, to the jurisdiction of the Tennessee court is based upon the fact that the TVA Authority, being a public agency domiciled in Alabama, may not under the laws of Tennessee be sued in that state since actions against a public agency are local and not transitory, and suit may be brought against it only at its domicile. Authority for the Tennessee rule invoked is the leading case of *Board of Directors of St. Francis Levee District v. Bodkin Bros.*, 108 Tenn. 700. There a suit was brought in Tennessee against the Levee District, which was a public corporation of Arkansas authorized to build levees on the Mississippi river. The Arkansas statute authorized it to sue and be sued, but domiciled the corporation in Arkansas. The Supreme Court of Tennessee held actions against such a Board not transitory but local, and that they must be brought at the place of domicile, resting its conclusion upon a rule of public policy, convenience and comity, which requires that public bodies should not be subject to the burden of carrying on law suits in scattered courts, since such suits inevitably hinder and delay the successful conduct of governmental functions.

[fol. 314-4] There is no challenge to the soundness of the rule of the Bodkin case. The question is whether it applies. The origin of, and the reasons underlying the rule were discussed by this court in *Park Co. v. City of Decatur*, 138 Fed. 550, 553. There a municipality of Illinois was sued by attachment in the courts of Kentucky. It was said, "As elsewhere, the municipalities of Illinois are localized in their sphere of operation. They have no legal presence elsewhere, and their officials do not and cannot ordinarily represent them abroad, certainly not for the purpose of receiving service of process against them, or giving jurisdiction over them in foreign courts. For this reason and because of the public inconvenience resulting from carrying on litigation in a distant forum, the rule has become quite generally recognized that such corporations cannot be sued elsewhere than in the venue of their location; and because

the venue of the courts in the counties of England and the states of the Union is usually, if not universally, coextensive with the boundaries of such counties, the rule is stated in the terms that a suit against a city or town or other limited municipal district must be brought in the courts of the county, and the county itself is only suable there." In fact in *Pack, Wood & Co. v. The Township of Greenbush*, 62 Mich. 122, the court indicated that the agents of a township may not bind the township by their acts or doings beyond the limit of the township unless expressly or impliedly authorized, for the localities in which they may exercise and perform them are limited by the boundaries of the township and the county in which it is located. The jurisdiction of a court may not therefore follow the persons of public officers wherever they may go beyond the municipalities for which they were elected or chosen. The *Bodkin* case does not go beyond this. It construed the Arkansas statute as giving consent to suits against the levee board only where the Board had its situs. Since it cannot have a situs outside of the state of its creation it is not subject to suit in a foreign state, and the levee district as an agency of the government is analogous to counties, municipalities, boards of education and the like.

[fol. 314-5] The Tennessee Valley Authority has no restricted situs. It is authorized under the act to carry on operations upon the Tennessee river and its tributaries without respect to state lines or the limits of judicial districts, and may acquire by purchase or condemnation anywhere, lands, easements or rights of way necessary to carry out the provisions of the act. In the exercise of the power of eminent domain conferred upon it, it may institute proceedings in any district court of the United States, within the jurisdiction of which required lands, easements, rights of way or other interests are located. Indeed, so unfettered is it by political subdivisions that commissioners who are to ascertain the value of property are not to be selected from the locality wherein land sought to be condemned lies. Residence is not synonymous with situs, and the act creating the Authority is replete with provisions pointing to its mobility and the transitory character of its activities. Neither the rule of the *Bodkin* case nor the reasons which gave it birth limit jurisdiction over an ambulatory corporation of this character to the courts of its domicile. The state court had jurisdiction, and the court below acquired it by removal.

It becomes unnecessary to consider other bases of jurisdiction asserted by the plaintiffs.

The challenge to the sufficiency of the bill is based upon two main grounds. It is said that the bill is defective because premised upon an alleged power program which is non-justiciable and because of an improper joinder of parties and causes which renders the bill multifarious, in violation of Equity Rules 26 and 37. In our opinion the existence of multifariousness must depend upon whether a justiciable controversy is presented by allegations of irreparable injury flowing from the authorization, promulgation and substantial initiation of the power program described in the bill. If there is no justiciable controversy between plaintiffs as a class and defendants, and one does not arise in respect to any plaintiff until some concrete act threatening irreparable injury to it is committed or threatened, such as the invasion of its territory by competing lines, the building of generating stations within transmission distance of its customers or the like, then indeed the bill may be clearly multifarious, and as we understand the argument, so much the plaintiffs are ready to concede. But if the unitary power program, as permitted or commanded by the act, or as promulgated by the directors of the Authority, directly creates or imminently threatens irreparable injury to the plaintiffs, varying in degree, perhaps, in respect to each but identical in kind, then we fail to see misjoinder either of plaintiffs or causes of action, for "a bill is not multifarious that presents a common point of litigation, the decision of which will affect the whole subject matter, and will settle the rights of all the parties to the suit;" Equity Rules 28, U. S. C. A., 114, Compilers Note 227. The general principle is well understood.

In determining the sufficiency of the bill we are not required to examine anything but the structure of the bill itself. *Nelson v. Hill*, 5 How. 126, 132. It becomes necessary, therefore, to consider the case made by it. The general program has been described—it remains to consider the injury charged to flow therefrom. Each of the plaintiffs has, it is alleged, valid authority by franchise or otherwise, to carry on its business in the territory it serves either indeterminate or for a period of years. Each operates within transmission distance of electric generating plants constructed, under construction or proposed. Each owns

property of great value for the distribution and generation of electric energy within its service territory, with rates fixed by state authority. Each is supplying public utility service as a going concern, with large investments devoted to that purpose. Each has numerous agreements with consumers and reasonable expectancy of renewal of contracts. Each has issued stocks and bonds purchased by the public on the faith and credit of its lawfully granted authority and the protection afforded such investments by the laws of the State and the Constitution of the United States. There exists, it is said, a common threat to the interests of each in that the Tennessee Valley Authority Act permits those charged with its administration to acquire and develop all the water power sites on the Tennessee river and its tributaries, to build and utilize steam plants auxiliary thereto, [fol. 314-7] to interconnect vast electric generating plants into a superpower system, to acquire and construct transmission or distribution lines throughout the transmission area of these plants, and to distribute and sell power so generated to domestic, commercial, municipal and industrial users of light and power, and the area embraced includes all or a substantial part of the territory in which each plaintiff operates.

In short, it is asserted that the Act permits or commands, and the defendants propose, the construction, development and operation of a mammoth Federally owned and operated system for the generation and distribution of electricity in competition with each plaintiff through all or a substantial part of its territory. Electricity so produced will be sold at a price with which private producers cannot compete because its sale is to be subsidized by the public treasury. It is the purpose of the act and of the persons charged with its administration to eliminate all existing privately owned and operated utilities. Not only is the mere existence of the statute a threat to their business because it depresses the value of their present securities and destroys the market for additional securities required to permit expansion and modernization of properties, but the defendants are threatening to go beyond the clear authority of the act by constructing and operating hydro-electric plants with auxiliary steam plants, by interconnecting such plants into a vast power system, and so to take over the entire market for electricity

in the area. The defendants have announced that unless existing utilities sell their transmission lines to them such lines will be duplicated. They have announced their intention to regulate local intrastate rates and service by a so-called "yardstick" method through Federally subsidized competition which will supplant state regulation as inadequate and unsatisfactory. Their power program will be carried out in Kentucky, Alabama, Georgia, North Carolina, Mississippi and Tennessee, and will include such cities as Chattanooga, Knoxville, Birmingham, Memphis and Atlanta. They have conspired with the Federal Public Works Administrator to force the existing utilities in the area, including the plaintiffs, to sell their properties for less than fair value, failing which their properties and services will [fol. 314-8] be duplicated with monies advanced by the Public Works Administration. In pursuance of this program, it is alleged, definite portions of the area have already been occupied, and the public has been offered contracts for electric energy at confiscatory prices in furtherance of a systematic campaign to injure the plaintiffs and destroy their credit and good will. The general allegations are supported by specific allegations, which it is neither necessary nor convenient to recite. In brief, as was urged in argument, the plaintiffs conceive themselves to be united by a common peril, and united therefore they complain.

To the justiciability of their common grievance, the defendants rely for a complete answer upon specific rulings of the Supreme Court in *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288. They lay the bill in the *Ashwander* case by the side of the present bill, and by exhaustive comparative analysis urge the conclusiveness of that decision on the issue now under consideration. The "deadly parallel" is frequently devastating, but so only when controversies are substantially identical and of equal breadth. We have given careful consideration to the *Ashwalder* case. It sustains constitutional power of TVA to enter into a specific contract with the Alabama Power Company, one of the original plaintiffs in the present suit. That contract related solely to the purchase by TVA of transmission lines for disposal of excess energy generated at Wilson dam and for exchange of energy. The *Ashwander* case was a derivative suit brought by preferred stockholders of the Alabama Power Company to set aside the contract as ultra vires. By limitations imposed upon the court by the na-

ture of the suit, and through limitations of the judicial process, the Ashwander case was kept within very narrow compass.

It is well understood, of course, that a stockholder may not maintain a suit in behalf of his corporation until he has made a demand upon the corporation that it do so, and the corporation has failed or refused to comply. The scope of the suit he may then maintain is limited by the scope of his demand. Ashwander and his fellow-stockholders were primarily concerned with the contract of January 4, 1934, for the sale by the Alabama Power Company of [fol. 314-9] the transmission lines running from Wilson Dam. The electric energy there generated was more than sufficient to supply all the requirements of the contract. The issues were confined to the constitutional authority for the construction by TVA of Wilson Dam, and for its disposal by reasonable method of the electric energy there generated. Finding the construction of Wilson Dam a valid exercise of constitutional power under the war and commerce clauses, the electric energy there generated to be property of the United States, for the sale of which authority exists in § 3 of Article IV of the Constitution, and the method of disposal not inappropriate according to the nature of the property, the court refused to set aside the contract, the decision concluding with the following: "The question of the constitutional right of the Government to acquire or operate local or urban distribution systems is not involved. We express no opinion as to the validity of such an effort, as to the status of any other dam or power development in the Tennessee valley, whether connected with or apart from the Wilson Dam, or as to the validity of the Tennessee Valley Authority Act or of the claims made in the pronouncements and program of the authority apart from the questions we have discussed in relation to the particular provisions of the contract of January 4, 1934, affecting the Alabama Power Company."

It is true that the stockholders in the Ashwander case sought a declaratory judgment with respect to the constitutional validity of the entire Tennessee Valley activity, and that the court did not recognize in their challenge to the Act, or to other things done in pursuance thereof, a case of actual controversy within the scope of the act of June 14, 1934, providing for declaratory judgments, for "the judicial power does not extend to the determination of ab-

stract questions," and a justiciable controversy does not arise save as pronouncements, policies and programs have "fruition in action of a definite and concrete character constituting an actual or threatened interference with the rights of the persons complaining." The court had clearly in mind, however, that the persons complaining in the Ashwander case were stockholders, whose interests might perhaps be affected by the invalidity of a specific contract [fol. 314-10] entered into by their corporation, but not necessarily or immediately affected by other acts or assertions of authority on the part of the Federal agency involved. This, we think, the court made plain: "While plaintiffs, as stockholders, might insist that the Board of Directors should take appropriate legal measures to extricate the corporation from particular transactions and agreements alleged to be invalid, plaintiffs had no right to demand that the directors should start a litigation to obtain a general declaration of the unconstitutionality of the Tennessee Valley Authority Act in all its bearings or a decision of abstract questions as to the right of the Authority and of the Alabama Power Company in possible contingencies."

The case made by the present bill presents a different aspect. Here are no preferred stockholders whose interests are limited to their distributive share in the assets of the corporation, and whose grievance is circumscribed by their own formulated estimate of it. Here are seventeen utility corporations already suffering the economic pinch of actual or threatened competition they conceive to be illegal, and facing what they conceive to be not only irreparable injury, but possible destruction, not through any one specific act of the defendants which singly considered may not be an unconstitutional exercise of power, but through a far flung program which they charge will inevitably effect and has for its very purpose their common annihilation. We are not convinced that the Ashwander decision precludes us from recognizing a justiciable controversy between these plaintiffs as a class and the Tennessee Valley Authority as an instrumentality of the Government involving the constitutional validity of the described program, whether authorized by the Act or transcending its authority.

Another consideration is of importance. Eighteen months have elapsed since the Ashwander decision in the Supreme Court. Three years have passed since the District Court announced the decision there reviewed. We are told that

the program of the Tennessee Valley Authority and its directors has gone forward with all reasonable dispatch. What then may have been merely tentative or speculative may now be approaching realization. What then was re-[fol. 314-11] mote may now be imminent, and mere concept have fruition in action of a definite and concrete character constituting an actual or threatened interference with the rights of those complaining. This may only be determined by full hearing on the merits. Moreover, the distinction between the case here made and that presented by the bill in the Ashwander case is not only clear but is brought into bold relief by the dissenting opinion in the Ashwander case. The injury and threat of injury is here assigned not to a single act or series of acts, but to the entire program, the full sweep of which is illustrated by the acts already done and proposed. The primary grievance in the Ashwander case related to the constitutional power of TVA to execute a specific contract. It was thought by the plaintiffs there to demonstrate invalidity of the contract not merely by challenging the power of the Authority to execute it, but by challenging its power to promulgate and carry into execution a power program of which the assailed contract was but a part, and to test the validity of the very act under the authority of which the program was conceived—even to the extent of seeking a declaratory judgment thereon. The power program was involved only as its possible invalidity might infect with invalidity the assailed contract. The dissent makes it clear that the court rejected the theory that “the plan makes the part unlawful.” So while it results that one may not secure relief against an act which is not itself an unconstitutional exercise of power, it also results that one may not complain of a plan which, though possibly open to attack on the ground of constitutional invalidity, does not as such injure him, and this is but an application of the familiar principle that courts will not pass upon the constitutionality of a statute *per se*, but will set aside only when both invalidity and direct or imminent danger of injury to the persons complaining of its enforcement are made clear. *Massachusetts v. Mellon*, 262 U. S. 447. The court below did not err in overruling the motion to dismiss.

We reach, therefore, the question as to whether, upon the showing made, the plaintiffs have established their right to a temporary injunction of the scope granted, and upon this

issue it is not necessary for us to determine the meritorious [fol. 314-12] question as to the constitutional validity of the power program, for the ultimate rights of the plaintiffs should be decided only when the court is "in possession of the materials necessary to enable it to do full and complete justice between the parties." *Eagle Glass & Mfg. Co. v. Rowe*, 245 U. S. 275; *Interstate Transit Co. v. City of Detroit*, 46 Fed. (2d) 42, (C. C. A. 6). Ordinarily upon an appeal from an interlocutory order granting or refusing a temporary injunction, the determination of the trial court will not be disturbed "unless contrary to some rule of equity or the result of improvident exercise of judicial discretion." *Meccano, Ltd. v. John Wanamaker*, 253 U. S. 136, 141; *City of Owensboro v. Cumberland T. N. T. Co.*, 174 Fed. 739, 747, (C. C. A. 6). The question here presented is not unattended with difficulty. It involves not only the substantial nature and debatable character of the claims of the plaintiffs, the probability of irreparable injury to them, the necessity and appropriateness of an injunction to maintain the status quo, but includes also the usual questions of balance of equities, and the possibility of severe damage to the defendants and to the public interest if the temporary injunction is wrongly issued. Relief is moreover based upon transgression of constitutional power by and under an act of Congress, and decision must ultimately if not presently be made with due regard to the presumption of validity that attaches to such enactment. Finally, the case presents the extraordinary situation in that the authority of the Congress to enact the statute in certain of its aspects, and to authorize thereby certain important transactions in respect to the construction of Wilson Dam, and to the sale and distribution by means of transmission lines of the electric energy there generated, has already been sustained by the Supreme Court, and that other acts and transactions here alleged to illustrate the sweep of the challenged power program are not readily to be distinguished from those heretofore validated. Granted that it is not necessary that the facts in support of a preliminary injunction be established with the same certainty that is required upon final hearing, and that we are not required to prejudge the meritorious controversy, yet it would seem that in a case of this kind, giving [fol. 314-13] full consideration to the history of the litigation, the gigantic public undertaking involved, the enormous sums of money already expended, the public interest which

may not be ignored, and while carefully considering the irreparable injury claimed, considering also possible overbalancing injury to the defendants and the public, the gravity of the factual and constitutional questions involved must be made to appear at least with more clearness than in the ordinary case, if not indeed, as suggested in the concurring opinion in the Ashwander case, "beyond peradventure clear."

Pursuant to the TVA Act, the Tennessee Valley Authority has now completed and put into operation not only the Wilson Dam, in the vicinity of Muscle Shoals, but the Norris Dam on the Clinch river, a tributary of the Tennessee river, and the Wheeler Dam on the Tennessee river. It has also initiated the construction of dams on the Tennessee river at Pickwick Landing, Tennessee, at Gunthersville, Alabama, and Chickamauga, in the vicinity of Chattanooga, Tennessee, and has entered upon preliminary operations for the construction of the Hiwassee Dam on the Hiwassee river, near Murphy, North Carolina. It has also recommended to Congress the construction of three additional dams on the Tennessee river, which, it asserts, will complete the contemplated nine-foot channel from Paducah to Knoxville and provide a substantial measure of flood control on the Tennessee and Mississippi river systems. It has been selling approximately 75% of its available electric power to four of the plaintiffs, and its existing electric service is limited to consumers in the service area of these four companies and of three others complaining.

The District Judge found that the defendants had acquired or constructed extensive electric transmission and rural distribution facilities; had built and are building transmission lines which duplicate those of the plaintiffs; had erected a substantial number of miles of high tension transmission and distribution lines, most of them rural; were actively in competition with some of the plaintiffs, offering electric service at substantially lower rates, and that pending determination of the suit upon its merits the plaintiffs are in danger of irreparable injury through further enlargement and extension of facilities, solicitation and negotiation of contracts with actual or potential customers in the plaintiffs' service area, and that loss to the defendants by reason of the injunction would not be comparable to the damage likely to be suffered by the plain-

tiffs in the event the injunction should issue. Though he deemed it immaterial, he also concluded that the facts of record supported the following proposed finding:

"All of the transmission lines constructed or acquired, or under construction by the Tennessee Valley Authority, or physically connected with Wilson Dam are within transmission distance of Wilson Dam, except the Santeelah-Hiwassee Transmission line and substation. All of the power now being sold by the Authority is being delivered by means of these lines or by interchanges under the contract of January 4th. The present dependable capacity of Wilson Dam is in excess of the present power requirements of the existing customers of the Authority excluding complainant power companies. The present load now being sold to customers of the Authority other than the complainant power companies, is approximately 22,500 kw. The maximum amount of power that it is reasonably possible for the Authority to dispose of up to May 1st, 1937, by the use of facilities already existing or which may be constructed up to May 1st, 1937, is 37,000 kw.

Concluding that the suit raised grave questions both of law and of fact with reference to the validity of the Tennessee Valley Authority Act, and of the acts of the defendants done and being done in reliance upon it, he enjoined them from enlarging or extending their facilities other than the completion of certain lines and sub-stations in process of construction, from serving consumers not already served, from initiating new construction, from soliciting or negotiating contracts with customers of the plaintiffs, or consumers in their service areas, from supplying service connections to existing rural lines, and in the main from enlarging the service beyond the scope of the project already established. While it is unnecessary to recite all of the [fol. 314-15] provisions of the injunctive order, it must be conceded that it is sweeping. Less would perhaps not have sufficed the plaintiffs in view of the scope of their claims of irreparable injury, and more would doubtless have resulted in complete paralysis of the entire activity.

We have already indicated some of the considerations that must control decision upon the propriety of a temporary injunction. A complete catalogue cannot, of course, be compiled. A petitioner's own appraisal of his fears

is not to be disregarded, so it is important to note that the bill when filed contained no prayer for preliminary relief, was not amended to pray for it until long after suit had been begun, and in this respect was brought up for hearing more than six months after its filing date. It is also important to note that the trial judge in the Ashwander case, although subsequently holding the Tennessee Valley Authority's disposal of power illegal, refused to grant a preliminary injunction, and that Judge Sibley of the Fifth Circuit Court of Appeals, sitting by designation in the Northern District of Georgia, likewise refused to preliminarily restrain the activity of the defendants in the area served by the Georgia Power Company, one of the original plaintiffs here (*Georgia Power Co. v. Tennessee Valley Authority et al.*, decided May 28, 1936).

However, grandiose may be the conception of its directors as to ultimate scope of the TVA project, it is clear, we think, that the presently contemplated plan includes provision only for a nine-foot level for navigation and flood control purposes on the Tennessee river. This will be accomplished by the seven dams building and proposed. There is no occasion, therefore, on the question of irreparable injury pendente lite to consider the effect of 149 inter-connected power supplying projects upon the rights of the plaintiffs in the present inquiry, however important that may become on final hearing. Nor is it to be supposed that all or substantially all of the construction already entered upon or planned can possibly be completed before the pending case may be reached and tried upon its merits. The trial judge found substantial support for a finding that the maximum amount of power reasonably possible for the [fol. 314-16] Authority to dispose of up to May 1, 1937, by the use of existing facilities, or those which might be constructed up to May 1, 1937, to be 37,000 kw. Without denying that some injury may be suffered if the injunction is lifted, it does not so clearly appear that it will of necessity overbalance the injury which must inevitably be suffered by the defendants and the public.

The possibility of maintaining the status quo by means of the injunction is not established. The court may not command the waters of the Tennessee river and its tributaries to cease their flow. The peculiar property that inheres in the power of falling water, and in the electric en-

ergy into which it may be translated, if not used, is forever lost. It is, moreover, inescapable that in the conduct of an activity of the size and scope herein delineated, a great organization must necessarily have been built up, including not only laborers, equipment and executives, but technological experts and specialists of many kinds. To appraise the injury to the defendants from the disorganization which must follow substantial or even partial cessation of activity is impossible, but that it will be great cannot be denied. So also in respect to the public interest involved. The loss, inconvenience and discomfort of the residents of the area in failing to obtain cheap electric energy, if it be found in the end that it may lawfully be supplied to them, may likewise not be measured, but equally incontrovertible is it that it will be great. Insofar, also, as restraint will delay effective control of the flood waters of the Tennessee river and its tributaries, the public interest in the achievement of that objective is similarly beyond appraisal. Human experience of the catastrophic effect upon great areas of overflowing rivers is too recent and too painful to permit of any doubt either as to the existence or extent of the public interest that is threatened by the maintenance of the injunction, and against which the threat to private interests must be balanced. From such possible injury it is clear no bond can adequately safeguard the public interest.

There is no occasion at this time to review the principles which govern courts in passing upon constitutional questions. The cases announcing them have been collected in [fol. 314-17] the concurring opinion of the Ashwander case, and public attention is presently focused upon them. The great power of the courts to set aside an act of Congress is exerted with reluctance in the ordinary case. It is invoked with even greater caution where great public enterprises are involved, and while it will be exercised only when it is absolutely necessary, this applies with even greater force on appeals from an interlocutory injunction [Allen v. Omaha Live Stock Co., 275 Fed. 1, 3 (C. C. A. 8)], for as was said by Judge Learned Hand, "We are told that to declare a statute unconstitutional we must be assured beyond question that it is such. A temporary stay now is a declaration for a time that it is unconstitutional; it is to dispense with the statute until the case be finally decided." *Dryfoos v. Edwards*, 284 Fed. 596, 603.

It is our conclusion under all of the circumstances of the case that the interlocutory injunction was improvidently granted, and should be set aside. We have given serious consideration to both the private interests and the public enterprise involved, and while "Elusive interests of haste should not be permitted to obscure substantial requirements of ordinary procedure" (Duke Power Co. v. Greenwood Co., 299 U. S. 259, 268), both are so important that undue delay in arriving at final judgment must likewise be avoided. To that end we have contributed as best we may by advancing the cause for argument and giving precedence to it in decision on present issues. We have no doubt that the District Judge, whose earnest application to the problems presented and whose courageous assumption of responsibility in respect to them is so evident upon this record, will cooperate with counsel to bring the cause to early hearing and disposition upon its merits.

Interlocutory decree reversed, and cause remanded for trial.

CONCURRING OPINION

ALLEN, Circuit Judge, concurring:

I concur with the conclusion and in the main in the opinion, but think that in addition to ruling upon the questions raised in this appeal, the court should lay down rules for the guidance of trial courts as to the practice of issuing temporary injunctions which in effect suspend the operation of statutes.

The considerations which govern the issuance of temporary injunctions in a suit between private parties have often been applied in injunction suits against public officials, where the damage to the public is readily ascertainable and where the public interest may be properly protected. However, the decisions recognize a clear distinction where the damage to the public cannot be readily appraised and where the acts complained of involve, as here, a public policy authorized by statute, ordinance or order of a duly constituted public board or officer. Cf. *Hurley v. Kincaid*, 285 U. S. 104, note; *Lagunitas Water Co. v. Marin County Water Co.*, 163 Cal. 332; *Jones v. Lassiter*, 169 N. C. 750; *Red C. Oil Mfg. Co. v. Board of Agriculture*, 172 Fed.

695, aff. 222 U. S. 380; *Berdan v. Passaic Valley Sewerage Commissioners*, 82 N. J. Eq. 235, aff. 83 N. J. Eq. 340. The public has an interest in the enforcement of all duly enacted law, and the citizens within the area of the Tennessee Valley Authority have a material and pecuniary interest in the enforcement of this particular law. *Railroad Commission v. Central of Georgia Ry.*, 170 Fed. 225, 232, 233. Cf. *Cook Brewing Co. v. Garber*, 168 Fed. 942, 951. A preliminary injunction in such a case is rightly refused where it would be granted in a suit between private individuals. *Cook Brewing Co. v. Garber*, *supra*. Cf. *New York City v. Pine*, 185 U. S. 93, 97; *Southern Counties Gas Co. v. City of Long Beach*, 295 Fed. 530, 533; *Water Company of Tonopah v. Public Service Commission*, 250 Fed. 304. The delay in carrying out the statute resulting from issuance of a temporary injunction in cases similar to this is an injury to the public interest.¹ Where such a [fol. 314-19] statute is suspended by preliminary injunction the damage to the public interest cannot readily be appraised, and the public interest cannot be protected by the giving of bond. The equities cannot be balanced, and the status quo, so far from being maintained, is destroyed.

OPINION

MOORMAN, Circuit Judge, dissenting in part:

I agree to the setting aside of the injunction, not on the grounds stated in the opinion or concurrence, but for the reason that in my opinion the bill does not state a case

¹ "The litigation is likely to end sooner if no injunction is in force. Its dispatch is greatly dependent upon the conduct of the case by the complainants. They would not be inclined to press the case for speedy decision when they have once secured a preliminary injunction. As long as it stands, it is as good as any other, and experience shows that it often has practically the effect of a permanent injunction. Knowledge of this fact was probably one of the causes for the enactment of the statute allowing appeals from these interlocutory orders." *Railroad Commission of Alabama v. Central of Georgia Ry.*, 170 Fed. 225, 233 (C. C. A. 5).

for judicial decision. The suit is an attack on the aims and purposes of the Tennessee Valley Authority as expressed in its "power program." Its purpose is to obtain a decree invalidating the program, not as an act or acts done or about to be done, but in its plans and purposes. This tends an abstract issue only. *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288, holds that it is not a justiciable question. I find none in the bill. To spell one out from one or another of its allegations of fact would make it defective for joinder of parties having interests too widely variant. I am of opinion, therefore, that the bill should be dismissed, and I dissent from the holding that it should not.

[fol. 315] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER DISSOLVING PRELIMINARY INJUNCTION—Filed June 16, 1937

Pursuant to the mandate of the Circuit Court of Appeals for the Sixth Circuit, the decree of preliminary injunction entered herein on December 22, 1936, is hereby vacated and dissolved, and all costs as certified by the Clerk of the Circuit Court of Appeals in the mandate from that Court under date of June 14, 1937, are hereby assessed against the complainants.

(S.) Gore, District Judge.

June 15th, 1937.

Approved as to form: Frantz, McConnell & Seymour, Solicitors for Complainants. James Lawrence Fly, Solicitors for Defendants.

[fol. 316] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER ON DEFENDANTS' MOTION TO STRIKE—Filed July 3, 1937

This matter coming on to be heard on the motion of defendants to strike portions of the bill of complaint and argu-

ment of counsel, and the Court being of the opinion that said motion should be denied in part and granted in part,

It is Hereby Ordered, Adjudged, and Decreed that paragraphs 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, and 13 of said motion be and the same are hereby overruled and denied.

It is Further Ordered, Adjudged, and Decreed that paragraph 4 of said motion be and the same is hereby overruled and denied, except that it is hereby ordered that all of section XII of the bill of complaint except the first two paragraphs and the last paragraph thereof be and the same is hereby stricken from the bill of complaint. The allegations so stricken are not to be considered as part of the pleadings in this cause for any purpose whatsoever.

It is Further Ordered, Adjudged, and Decreed that paragraph 14 of said motion be and the same is hereby overruled and denied, except that the following items appearing in exhibit C to the bill of complaint are hereby stricken from the bill: items 1, 2, 18, 19, and 20. The said items so stricken are not to be considered as part of the pleadings in this cause for any purpose whatsoever.

To the ruling of the Court overruling and denying the prayers of said motion, the defendants duly reserved an exception. To the action of the Court in sustaining a part of said motion the complainants except.

Approved for entry.

Gore, District Judge.

July 2, 1937.

Approved as to form: Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants. William C. Fitts, Jr., Solicitor for Defendants.

[fol. 317] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER APPOINTING SPECIAL MASTER—Filed July 3, 1937

This 2nd day of July, 1937, came on for hearing the motion of complainants herein for an order appointing a special master herein, and upon consideration of said motion and the evidence offered in support of the same and statements

of solicitors for parties herein, the Court finds that a showing has been made of an exceptional condition herein requiring the appointment of a special master with the powers and duties hereinafter stated.

It is Therefore Ordered by the Court that Hal H. Clements, Jr., be and he is hereby appointed special master herein with the following powers and duties, viz:

1. Subject to the limitations contained in Equity Rules 46, 47, and 54 as to the circumstances in which depositions may be taken in suits in equity in the federal courts, said special master shall take and report to the Court with all due dispatch evidence offered by either complainants or defendants upon the issues raised by the bill of complaint [fol. 318] and the answer of defendants.

2. Said special master shall assign the times and places for the taking of evidence under this order and shall give notice to the parties hereto, or their solicitors, as to the particular hour and place he will begin to take testimony, and said master shall thereafter continue to take testimony from day to day or adjourn the taking of testimony from time to time and from place to place as said master may order. Notice of the time and place of such adjourned hearings to be given to the parties or their solicitors by said master. Said master is hereby authorized to take testimony at such places outside the limits of the Eastern District of Tennessee as said master may deem necessary, proper, or convenient. The Court reserves the right to authorize the taking of testimony before said master within the Eastern District of Tennessee if and when it appears that this cause will be accelerated thereby.

3. Said special master shall himself or by designation of one or more competent persons report stenographically and transcribe in typewriting the testimony of all witnesses heard by said master and all proceedings before him.

4. In the conduct of the proceedings before him, including the issuance of subpoenas, requiring answers to questions, compelling the production of documents, ruling upon the competency of evidence, and enforcing obedience to his rules of procedure, said special master shall have the same powers as those conferred upon examiners, commissioners, and masters by Equity Rules 51 and 52. Except as modified by

this order, the method of procedure set out in the Equity Rules shall be followed by said special master.

[fol. 319] 5. Except as modified by this order, the federal statutes and equity rules governing the taking and use of depositions on the trial of suits in equity in federal courts shall govern in this case.

Approved for entry.

Gore, District Judge.

O. K. William C. Fitts, Jr., Solicitor for Defendants.

O. K. Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants.

[fol. 320] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER ON DEFENDANTS' MOTION FOR BILL OF PARTICULARS—
Filed July 8, 1937

This cause came on to be heard by consent of parties at Cookeville, Tennessee, on June 28, 1937, before the Honorable John J. Gore, District Judge, on the motion of defendants for bill of particulars filed in this cause on June 12, 1937, and after hearing the arguments of counsel, the Court is of the opinion that said motion should be, and the same is hereby overruled in its entirety except as to Sections 6 and 7 thereof, which are overruled with limitations, said limitations being that complainants shall furnish such particulars in these respects as they are able to do within a reasonable time, not exceeding thirty days from entry of this order, but that complainants shall not be precluded from proving any such matters at the trial, if they have not come to their knowledge within time to notify counsel for defendants before the trial, upon the ground that they have not been included in the particulars applied for by complainants before trial.

To the action of the Court in overruling said motion with the exceptions aforesaid the defendants severally except.

Approved for entry.

(S.) Gore, District Judge.

O. K. as to form: (S) J. Lawrence Fly, Solicitors for Defendants.

O. K. Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by (S.) Charles M. Seymour, Solicitor- for Complainants.

[fol. 321] IN UNITED STATES DISTRICT COURT

(Caption omitted)

BILL OF PARTICULARS—Filed Aug. 6, 1937

Now come the Complainants, by their solicitors, and for further and better particulars of the allegations set forth in Paragraph XXI of their Bill of Complaint, state that the Defendants have made representations as therein alleged at the times and places hereinafter set forth, among others, to wit:

1. On June 30, 1933 the Defendant TVA stated in a release to the press:

“The Authority intends to use Muscle Shoals as a ‘Yard-stick’ to determine the relative costs of public and private power operation * * *.”

2. On August 15, 1933 Defendant A. E. Morgan stated in a radio address at Washington, D. C., released to the press by Defendant TVA on August 16, 1933:

“Finally, in 1933, at President Roosevelt’s suggestion, provision for the public ownership and operation of Muscle Shoals was incorporated in the Tennessee Valley Authority law. This provision may make possible the carrying out of one of President Roosevelt’s policies—that of providing a publicly owned and operated power system as ‘a yard-stick’ by which to measure the relative economy and efficiency of public and private ownership and operation.”

[fol. 322] 3. On September 28, 1933 Defendant Lilienthal stated in a speech at Chattanooga, Tennessee:

“The public must protect its interests in so vital a force. There are various expedients to accomplish this result.

One is by commission regulation. It is pretty well recognized that our operations cannot possibly be set up as a measuring rod to protect the public interest, and so to supplement regulation, Congress has provided for a measure of public operation on a limited scale. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity is a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interests involved, that the public, at any time, may itself assume the function of providing itself with this necessity of community life.

.

"What the Authority is trying to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations. To set up such a 'yardstick' the Authority obviously must undertake to serve an area which is large enough and sufficiently concentrated, with enough population density and with a sufficiently diversified industrial, commercial and residential load to provide a fair test. As business men it is apparent to you that if the Authority is only to serve the parts of a territory which a private utility has not chosen to serve, or is to serve only sparsely populated areas, the result of our operations cannot possibly be set up as a measuring rod. The Authority will necessarily have to undertake to serve an area of concentrated industrial territory, good farms and favorable distribution possibilities. It will, therefore, be necessary to include several cities of fair size in the area. The people of Knoxville and Birmingham are soon to vote on the acquisition of their distributing systems. We are now constructing a tie line between Muscle Shoals and the [fol. 323] new dam at Cove Creek and we propose to enter into contracts with municipalities and other agencies desiring this service in the territory between those two points.

"Obtaining this fair market in which to sell power, seems to be in sight, in view of the interest shown by about one hundred fifty municipalities. In fact, the problem of choosing between applicants, will apparently be a real one."

4. On October 17, 1933 Defendant Lilienthal stated in a speech at Memphis, Tennessee, later released to the press by Defendant TVA:

"Is it any wonder then that the people are determined to maintain the most vigilant public control of this liberating force? Various expedients for the public's protection have been adopted. One is regulation by state commissions. It is generally recognized that such regulation has not been entirely adequate to protect the public interest. And so, to supplement regulation, Congress has provided for a measure of public operation on a limited scale. This public operation is to serve as a yardstick by which to measure the fairness of electric rates.

.

"What the Authority is required to do in its power program is to set up an area for power operations which will be on a comparable basis with typical private operations"

5. On November 7, 1933 Defendant Lilienthal stated in a speech at Nashville, Tennessee, later released to the press by Defendant TVA:

"Now this is what had been going on in the United States. Regulations by commissions had in many states proved ineffectual. In some states it was perfectly obvious that the regulators were not regulating the utilities, but in effect, utilities were regulating the regulators. In other words, the regulatory commissions were doing an honest and sincere job, but were hampered by the inherent and interminable procedure of regulation.

.

"Regulation by commissions has not proved adequate. To supplement regulation by commissions, Congress passed [fol. 324] the Tennessee Valley Authority Act. The policy written into this Act does not represent an assault upon private management and ownership of public utilities, but it is a determined attack on private mismanagement of the public business of power. The Tennessee Valley Act is a well considered effort to prevent a recurrence of the looting of the power business at the expense of the people back home—consumers and investors alike.

.

“ * * * The small investor was assured that public regulation would protect him against watered stock and would give him a measure of security. He was assured that the public utility industry was in the hands of men who regarded themselves as, in effect, trustees of a great public business. And, when the small investor learned the real facts, his resentment was even greater than that of the consumer, who felt that his rate for service could be much lower had the electric business been operated on a proper basis. With this background, Congress passed the Tennessee Valley Authority Act which provides for a measure of public operation of the power business.

.

“This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service and that unless it is exercised by private corporations with fairness, with efficiency, without financial jugglery and with a due sense of responsibility to the paramount public interest involved, that the public, at any time, may itself assume the function of providing itself with this necessity of community life.”

6. On November 10, 1933 Defendant Lilienthal stated in a speech at Atlanta, Georgia, released to the press on November 11, 1933 by Defendant TVA:

“The national power policy of the President and the Congress written into the Tennessee Valley Authority Act recognizes that electric power, next to the soil, is our greatest resource. It recognizes that the people must maintain public control of this liberating force. This is the first objective of the national power policy to which I have referred.

.

[fol. 325] “And so, to supplement regulation by commissions, Congress passed the Tennessee Valley Authority Act. This Act is not an assault upon private ownership and management of public utilities. But it is a determined attack on private mismanagement of the public business of power at

the expense of the people back home—consumers and investors alike.

.

“It was with such a background that Congress passed the Tennessee Valley Authority Act, and set up a measure of public operation of the power business. This public operation is to serve as a yardstick by which to measure the fairness of electric rates. It has an additional function. It is a reminder that electricity performs a public service. It is a reminder that unless that business is conducted by private corporations with fairness, without financial jugglery and with a due sense of responsibility to the paramount public interest, that the public at any time may itself assume the function of providing itself with this necessity of community life.

.

“We believe that definite plans of the Authority now in process of execution afford the quickest means of accomplishing a thorough revision of rate schedules and rate theories throughout the country, and with it, an increase in the use of electricity. This is an essential part, as I see it, of the new national power program inaugurated by the Tennessee Valley Authority Act.”

.

“The Tennessee Valley Authority Act marks the beginning of a new national power policy and national power program. This new national policy has two major objectives. The first objective is more effective protection of the public interest, by the setting up of a measure of public operation of power as a ‘yardstick’. The second objective of this new national policy is a greatly increased use of electricity in the homes, the farms, and the factories of the United States—an electrified America.

“The President and the Congress have set themselves to the task of putting to work the vast sources of electricity which lie idle and unused. We are working toward no less a goal than the electrification of America. The plans have been laid. Legal authority is ample. The economic difficulties can be overcome. The project is practical and feasible.

[fol. 326] ible. The program can be carried out. Within the next decade it lies within the power of the people of the United States to make electricity in very truth the servant of the average man and woman in the homes, farms and places of business of this country.

"The power program of the Authority is a crucial part of its plans for immediate action and of the long range program for the development of this region. This power program is of particular interest not only within the Valley, but it has and is intended to have a national significance. For the problems which center about the power question here in the southeastern region of the United States are questions not peculiar to this area, but which are common to the country as a whole.

.

"So much for the first objective of the Tennessee Valley Authority—the regulatory, public control purpose of this national power policy. We come then to the second objective, of at least equal significance.

"The power program of Congress and the President has as its major objective a constantly wider use of electricity. The goal of this national power policy is a constructive one; it is nothing less than the electrification of the homes and farms of the United States. It is for the Authority to lead the way through the tangle of engineering obstacles and of economic difficulties which obstruct the path to a genuinely widespread use of this great resource of electricity. I know something of the difficulties which lie ahead. This is not an academic exercise; it is not going to be a Sunday School picnic. We have been advised on the business problems which have to be surmounted. We know something of the engineering difficulties; of the problems of rising costs of transmission; of the problems of water control; of the difficulties of unfavorable peak loads. There is a serious problem of changing our custom of doing things. But in spite of all the difficulties, I am convinced that this objective of an electrified America is no mere Utopian dream. It can aid in the program of re-employment and national recovery toward which slowly but surely the American people, under the leadership of President Roosevelt, are moving."

[fol. 327] 7. On November 15, 1933 Defendant Lilienthal made the following announcement at Washington, D. C., later released to the press by Defendant TVA:

"The 20-year agreement between the TVA and Tupelo is expected to set a standard for contracts with other municipalities within transmission distance of Muscle Shoals. Besides rate schedules, the Tupelo contract carries with it certain rules and regulations applicable to all TVA customers. Among other things, Tupelo agrees:

"(a) To administer its electric system as a separate department and not to mingle funds or accounts with those of any other of its operations.

"(b) To keep its electric system accounts according to a system of accounts to be prescribed by Authority after conference with Contractor, which system of accounts will so far as possible be uniform with other systems prescribed and applied in other municipalities purchasing electrical energy from Authority. Authority agrees at its own expense to render advisory accounting service in the setting up and administering of such accounts.

"(c) To furnish promptly to Authority such operating and financial statements relating to electric system operations as may be requested by Authority.

"(d) To allow the duly authorized agents of Authority to have free access to all books and records relating to electric system operations.'

.

"Developing Surcharge—Contractor agrees not to depart from the resale rates set forth in Schedule B (resale rates) without first securing the consent of Authority: Provided, however, that in order to maintain Contractor's revenues in the developmental period in which the increased demand for power may not compensate for the greatly reduced rates provided for in Schedule B, Contractor may impose a surcharge upon those classes of consumers subject to a surcharge under the provisions of said schedule!"

[fol. 328] 8. On January 5, 1934 the Defendant TVA stated in a release to the press:

"The essence of this agreement is the recognition by the power companies who are parties to the arrangement that

the TVA is under a duty to operate a public power business, directly and through public agencies, in order to provide a public 'yardstick' of the fairness of the rates charged by privately owned utilities."

.

"There has been a growing feeling that this method (regulation by Commission) of expressing the regulatory relation of the government to the public utility business was inadequate to meet the needs of the situation. These critics insisted that commission regulation by and large, had been ineffective; that in many states instead of the regulators regulating the utilities, the utilities were regulating the regulators; that financial abuses of the most lurid sort had taken place despite regulation; that the processes of regulation were too slow; and that the great technological savings in the field of electricity had not been passed on to the consumers.

"The power policy written into the Tennessee Valley Authority Act represents an attempt to regulate public utilities not by quasi-judicial commissions, but by competition. The Act definitely puts the Federal Government into the business of rendering electric service. The Authority is required to acquire a market, to set up an area in which to conduct its operations. The results of these operations in this limited area are intended to serve as a 'yardstick' by which to measure the fairness of the rates of private utilities, and to prevent destructive financial practices by private utilities. In carrying out this competitive relation between the Federal government and the private business of electricity, the wastes of competition are to be eliminated, and the regulatory function of competition emphasized. In other words, duplication of facilities and competition in the same community is to be avoided. There is not time to discuss in detail the principles which the Authority has adopted to govern its operations in this new relation as a competitor of a public business. These principles have been set out by the Authority in its Power Policy, and have been discussed in some detail in various public statements."

[fol. 329] 9. In February, 1934, Defendant Lilienthal in an article entitled, "Lower Power Rates Mean More Appliance Sales", in *House Furnishing Review*, stated:

"Now the reasons for the existing rate schedules are many. Part is due to tradition. There is a tremendous accumulation of musty legal theory and out-moded engineering practices in the field of electric rates. Part of it is due to the fact that domestic and farm electric service is monopolistic; and it is typical of monopolies that they change their practices very slowly, if at all. In many cases it is due to pressure of an outrageous capital structure, to bad management, to lack of foresight. We believe that definite plans of the authority now in process of execution afford the quickest means of accomplishing a thorough revision of rate schedules and rate theories throughout the country, and with it, an increase in the use of electricity. This is an essential part, as I see it, of the new national power program inaugurated by the Tennessee Valley Authority Act."

10. In March, 1934, Defendant Lilienthal stated in an article entitled, "Business and Government in the Tennessee Valley", published in *The Annals of The American Academy of Political and Social Science* (Volume 172, pp. 45-46):

" * * * * *

"The power policy written into the Tennessee Valley Authority Act represents an attempt to regulate public utilities not by quasi-judicial commissions but by competition. The act definitely puts the Federal Government into the business of rendering electric service. The Authority is required to acquire a market and to set up an area in which to conduct its operations. The results of these operations in this limited area are intended to serve as a 'yardstick' by which to measure the fairness of the rates of private utilities, and to prevent destructive financial practices by the latter."

"In carrying out this competitive relation between the Federal Government and the private business of electricity, the wastes of competition are to be eliminated and the regulatory function of competition emphasized."

[fol. 330] 11. On April 21, 1934 Defendant Lilienthal stated in a speech at Chattanooga, Tennessee, released to the press on April 22, 1934 by Defendant TVA:

" * * * This perennial scrutiny of the work of public servants will certainly do more to protect the consumer

against inefficiency and excessive rates than the sympathetic wrist-tapping which goes under the name of public utility regulation in so many states."

12. On April 24, 1934 Defendant Lilienthal stated in a speech at Boston, Mass., released to the press on April 25, 1934 by Defendant TVA:

"In many states it had become perfectly obvious that the regulators were not regulating the utilities, but that in effect the utilities were regulating the regulators. In other states the regulatory commissions were doing an honest and sincere job, but were rendered ineffective by the interminable procedure of regulation. And so to supplement and reinforce regulation, Congress passed the Tennessee Valley Authority Act."

.

"The first duty of the Tennessee Valley Authority in its power program is to set up what the President has called a 'yardstick' by which to measure the fairness of electric rates. It has an additional function. It is a reminder that unless that business is carried on by private corporations with a due sense of responsibility to the paramount public interest, that the public, at any time may assume the function of providing itself with this necessity of community life."

.

"So much for the first objectives of the Tennessee Valley Authority—the regulatory, public control purposes of this national power policy, we come then to the second objective of at least equal significance."

"The power program of Congress and the President has as its major objective a constantly wider use of electricity. The fundamental problem of the Tennessee Valley Authority, of the electric industry, of the Federal government, is to devise economic ways and means to make electricity generally available, of promoting the widest possible use of power in the home, on the farm and in the factory."

[fol. 331] 13. On May 17, 1934 Defendant Lillienthal stated in a speech at New York, N. Y., later released to the press by Defendant TVA:

"By 1935 the management of some of our major electric utilities had become a national scandal. It was inevitable that President Roosevelt and the Congress should squarely face this situation. It was inevitable that they should see that regulation alone was inadequate to fully protect either the consumer or the investor. It was plain to all that regulation needed strengthening and needed supplementing.

"Neither the industry nor the investors took effective action to meet this situation. The President and Congress, in setting up the Tennessee Valley Authority, were merely responding to an overwhelming public sentiment. The public, investors and consumers alike, demanded an experiment on a broad scale, of public electric operation. This development was designed to serve as one means of seeking to prevent a continuation of financial and operating practices which had brought discredit on the entire industry, sound and unsound managements alike.

.

"The Authority is interested not merely in the expansion of its own electric sales; it is interested in increasing the consumption of electricity throughout the South, in disregard of public or private ownership."

14. On May 18, 1934 Defendant TVA released to the press:

"Besides adopting a power policy and establishing rate schedules, the Authority has put into effect rules and regulations governing sale of its power"

15. On June 13, 1934 Defendant A. E. Morgan stated in his testimony before the Sub-committee of the Committee on Appropriations, U. S. Senate:

"Senator Dickinson: In other words, as I understand it now, you are setting up in a municipality, a municipal cooperative organization for the purpose of buying from you electric current and distributing it among the patrons of that locality.

"Dr. Morgan: We are cooperating with an association of citizens.

"Senator Dickinson: And in that cooperative organization what influence do you have on rates?

[fol. 332] "Dr. Morgan: We make a contract with them in which we prescribe the maximum rates that they may charge.

"Senator Dickinson: And that is as to the consumer.

"Dr. Morgan: That is as to the consumer."

16. On August 1, 1934 Defendant TVA released to the press:

"Wholesale and resale rates have been fixed. * * * A transmission line to connect Wilson, Wheeler and Norris dams is under construction. One hundred miles of rural transmission lines have been pushed out into new territory. Arrangements have been made to serve more than fifty municipalities at greatly reduced rates, and private power companies have been stimulated to substantial rate reductions in other parts of the Valley."

17. On October 10, 1934 Defendant Lilienthal stated in his testimony before the Tennessee Railroad and Public Utilities Commission:

"By Mr. Johnston:

Q. Does the Authority stand ready as a wholesaler of power to all comers to enter into an agreement with City of Knoxville for the supply of its energy without any limitation as to the resale price?

A. No.

Q. Would not?

A. Would not, and would not as to any of those other municipalities.

Q. Would not as to any of these other municipalities?

A. Without any limitations?

Q. That is selling without any agreement, that is any one would buy from a private manufacturer?

A. We believe that statute requires that we do not enter into contracts without the resale rates.

[fol. 333] Q. Don't let me interrupt you, but I just want to get that question. Will you read the answer there, or I can repeat it off the record.

(Mr. Howard reads:) 'The present policy, we believe the statute requires we do not enter into any contracts without resale rates.'

A. Without agreement as to resale rates."

18. On October 13, 1933 Board of Directors of Defendant TVA approved the following statement:

"We know the existing demand is being adequately supplied by the privately owned utilities. There are only two ways whereby the Authority can dispose of this additional block of power: (1) Sale in bulk to the private utilities. Since these utilities have now adequate supplies, this alternative implies the creation of additional demand consequent upon either a substantial industrial development, or substantial increases in domestic and farm use, rendering existing privately-owned facilities inadequate. Distribution would continue to be through the facilities of existing companies. Rates to the ultimate consumer of power purchased from the Authority would be regulated by the Authority, under the terms of the contract of purchase. (2) By sale of such power to municipalities or to the public agencies which are now being served by private utilities. The Authority might dispose of its power by taking part of the field now occupied and served by the existing utilities. A typical case is sale at wholesale to a municipality which owns its own distribution system, now purchasing at wholesale from a private utility. Since there are few municipalities in the area which own their distribution systems, such a method of disposing of the Authority's power would involve the acquisition by such municipalities of distribution facilities now owned by the utilities, or the construction of competing facilities."

• • • • •

"C. The President's policy: The "Yardstick."

President Roosevelt has uttered publicly that one of the functions of operation of Muscle Shoals is as a "yardstick" [fol. 334] by which to measure the reasonableness of electric rate charges. In view of his sponsorship of this legislation, the yardstick idea must be taken to be definitely a part of the policy embodied in the Tennessee Valley Authority Act.

• • • • •

4. For the Authority's operations to provide a "yardstick" of public operation by which to measure private operation, it is essential that the Authority engage not only

in the generation, but participate in the transmission and distribution of electricity, since these latter two phases of electric service represent the most important part of the cost of such service. A public yardstick, to have value, necessarily means public operation from power house to consumer's premises. (It is for this reason that the Authority has adopted a policy of rate and accounting control of municipal distribution operations.)"

19. On October 17, 1933 Defendant Lilienthal stated in a speech at Memphis, Tennessee, later released to the press by Defendant TVA:

"I suppose it is obvious that all computations concerning costs are based on the expectation that the Authority will sell the power which it has available. Muscle Shoals was turned over to us as a going plant, but not as a going concern with customers. Obviously, if we sell only one kilowatt hour, our cost will be hundreds of thousands of dollars a kilowatt hour, rather than a few mills. If the power is not utilized in volume, no one will receive the great potential benefits of the wealth of the Tennessee River. It is axiomatic in the electric business that an increase in use decreases the cost per unit of output. Accordingly, we look forward to a maximum use of our facilities, because it is in that way that the Authority and those agencies which buy its power at wholesale can steadily bring down rates to the householder, the farmer and the business man, and bring to this area the economic and social benefits of the President's plan."

• • • • •

"The Authority must carry out the national policy entrusted to it. It must acquire a market for its power."

20. On November 10, 1933 Defendant Lilienthal stated in a speech at Atlanta, Georgia, released to the press on November 11, 1933 by Defendant TVA:

[fol. 335] "Within the area of the Tennessee Valley, for example, privately owned electric companies have generating and transmission facilities which can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. A fair estimate is that 25% of the investment in power houses

and transmission lines is idle, and is piling up fixed charges, because the customers of these companies are still tied to a low average use of electricity. The Tennessee Valley Authority has a hydro-electric plant at Muscle Shoals with a rated installed capacity of 250,000 H.P. But that is only the beginning of the story. The Authority is constructing a dam and power house at Cove Creek, and another dam and power house above Muscle Shoals at what is known as the 'Joe Wheeler' dam, which together will increase the capacity of Wilson Dam to at least 600,000 H.P.

.

"If we admit that the use of electricity cannot be increased many fold; if that is our mental attitude, then we must be logical and immediately stop construction of the Cove Creek dam and of the Joe Wheeler dam."

21. On November 20, 1933 Defendant A. E. Morgan stated in a speech at Boston, Mass., released to the press on November 21, 1933 by Defendant TVA:

"* * * the economy of electric power in the Tennessee Valley area will depend much on large scale developments that are designed and operated as single integrated systems. The entire Tennessee River System, with its thousands of miles of streams, should be under one control and ownership, which means government ownership."

22. On January 5, 1934 Defendant TVA released to the press:

"Had the power companies which are parties to this contract been unwilling to sell these facilities at a fair price, or had they insisted on payment for intangibles or water, the Authority would have been under a definite mandate to construct duplicating facilities rather than submit to being 'help up.'"

[fol. 336] 23. In January, 1934 Defendant A. E. Morgan, in a magazine article entitled "Bench-Marks in the Tennessee Valley", published in 23 Survey Graphic, stated at pages 5 and 105:

"Without suggesting any particular level of unit cost, I venture the opinion that if the water-power development

of the entire Tennessee River drainage area of 40,000 square miles can be given a single unified ownership and control, the unit cost of power may be no more than half of what it would be with divided ownership and management. To illustrate: Near the east boundary of Tennessee is a dam-site which will provide vast storage capacity for an area of very heavy rainfall and run-off of a few thousand square miles. From this point down the Tennessee River to its mouth is a fall of, roughly, one thousand feet, nearly all of which can be used for generating power.

.

"Now consider what would be accomplished by a single unified system, thoroughly interconnected by transmission lines and controlled from a single office. During wet seasons or wet years the storage dams would be closed until their reservoirs were filled, and all power would be developed from plants having no storage, or inadequate storage. If rains should be heavier on one tributary than on another, the full reservoirs would be drawn upon. On some of the smaller tributaries of the Tennessee, sometimes at high elevations, there are reservoir sites of very large capacity, but without water enough to fill them. Those cheapest and most capacious sites could be developed by building dams, and then, for off-peak hours at night, for a few wet months during the year, and for intermittent wet seasons, all surplus power could be used in pumping water uphill into those high reservoirs which would have power plants to be used during peak loads or for a standby supply. . . .

"With such a single integrated system under a single control, the full hydro-electric power possibilities of the region could be realized, and the cost per unit of private power might be not more than a half or even a third of the cost of separately owned and operated plants. . . .

"Such unified control and operation implies government ownership and operation. The control of this great electric-power system by a private corporation would give economic [fol. 337] power over the people of the region which no self-appointed private business men ought to hold. Such management and operation would of necessity be governmental and public in its nature. . . ."

.

"Just as an adverse balance of foreign trade tends to bankrupt a nation, so the constant drain from a municipality of payments to a foreign-owned utility tends to economic impoverishment. Given administration of equal quality, the ideal status of a city utility is that it is fully amortized and is owned by the public it serves. Regional independence from a perpetual drain is no less important for an area as large as that of the TVA than for a city."

.

"By the methods I have described in this article, the TVA hopes to accomplish several objectives:

"First, it hopes to unify the development of water power for the entire Tennessee River System and thus avoid the enormous waste of various independent installations.

"Second, it intends to support vigorously the position that the generation and sale of power is properly a public function, in which it is proper for the public to engage.

"Third, it hopes to establish a 'yardstick' for power, to discover what electric power ought to cost the people, and to provide a comparison between public and private ownership.

"Fourth, it hopes to encourage the wider and freer use of electricity in the American home.

"Fifth, there are dangers and disadvantages in public ownership. To evade or to deny this fact can only lead to trouble. The TVA hopes to face honestly these disadvantages and if possible to remove or to master them."

24. In January, 1934 Defendant A. E. Morgan, in a magazine article entitled, "The Tennessee Valley Authority," published in *Scientific Monthly* (Address to the National Academy of Sciences, Massachusetts Institute of Technology, Cambridge, November 20, 1933), stated at page 64:

[fol. 338] "Lastly, the economy of electric power in the Tennessee Valley area will depend much on large-scale developments that are designed and operated as single integrated systems. The entire Tennessee River system, with

its thousands of miles of streams, should be under one control and ownership, which means government ownership.

“ . . . the value of that private plant will be doubled by the building of Norris Dam at public expense. Only by a single organized system of water power plants for the whole Tennessee River system can the full economy be realized. With that organization, water power may cost less than half what it would if the various units should be developed independently by private companies. Water power is to have stiff competition from steam and Diesel engines. If the Tennessee River region is to realize its possibilities in water power it can not afford to throw away this economy.”

25. In January, 1934 Defendant Lilienthal, in a magazine article entitled “Electrification of America”, in House Furnishing Review, stated at page 52:

“Looking at the country as a whole, without respect to public operation or private operation, it is perfectly evident that we now have and soon will have a tremendous surplus supply of electricity. Within the area of the Tennessee Valley, for example, privately owned electric companies have generating and transmission facilities which can care for between 30% and 40% more demands for electricity than is now required, even allowing for reasonable spare capacity. A fair estimate is that 25% of the investment in power houses and transmission lines is idle, and is piling up fixed charges, because the customers of these companies are still tied to a low average use of electricity. The Tennessee Valley Authority has a hydro-electric plant at Muscle Shoals with a rated installed capacity of 250,000 H.P. But that is only the beginning of the story. The Authority is constructing a dam and power house at Cove Creek, and another dam and power house above Muscle Shoals at what is known as the ‘Joe Wheeler’ dam, which together will increase the capacity of Wilson Dam to at least 600,000 H.P. . . .”

[fol. 339] 26. In March, 1934, Defendant A. E. Morgan stated in a magazine article entitled, “Purposes and Methods of the Tennessee Valley Authority,” appearing in The

Annals of The American Academy of Political and Social Science (Vol. 172, p. 57):

"There is one other element that I want to mention in the matter of electric power. It is economy of generation. We are taking the position that the whole Tennessee River system ought to be a single unit in the planning and distribution of electric power. Some of the plants have abundant power only a part of the year; other plants can have storage so that all the power can be used all the year or in any part of the year. If we can use those plants at the time they have power and tie them all together as a unit, I believe we can get at least twice, possibly three times, as much value for a dollar's expenditure as we can if those plants are owned individually. I believe it is not possible to organize them under private ownership, unless we should have some great super-corporation dictating the economic conditions of life over an area three-quarters the size of England. We believe that public ownership is the only right way to integrate that system, and we are working on that program.

"And so, as we go along, we are trying to take one after another of the economic problems that arise in that region, to work from chaos into order. We are trying not to do it in an arbitrary way of taking the property because we want it, but are trying to find ways in which a transition can be made from the present regime to another regime in which there will be ownership at home, if possible, with the elimination of excessive charges and of duplication and friction, in which the essence of economic planning can be achieved in an orderly and systematic and patient manner."

27. On April 22, 1934 Defendant Lilienthal stated in a speech at Boston, Mass., released to the press on April 25, 1934 by Defendant TVA:

"The Authority must carry out the national policy entrusted to it. It must acquire a market for its power. It must work toward a wider use of electricity. None of these objectives will result in the predicted calamities to the industry and its bona fide investors. The Authority early [fol. 340] adopted a policy of buying, at fair prices, the property of private utilities in the area selected for its 'yardstick' operations rather than to duplicate facilities and engage in destructive competition."

28. On May 17, 1934 Defendant Lilienthal stated in a speech at New York, N. Y., later released to the press by Defendant TVA:

"The Authority is under duty to acquire a market for its power. It is authorized to compete with existing utilities, and for this purpose is expressly empowered to erect duplicate facilities."

29. On May 21, 1934 Defendant Dr. Morgan stated in his testimony at the House of Representatives hearing, pp. 155, 156, 162 and 163:

"Mr. Bacon: On the question of the market for power, do you intend to take power into the big cities, like Birmingham and the other industrial centers of that region?"

"Dr. Morgan: In purchasing from the Commonwealth & Southern Co., we made an agreement with them that we would not invade their territory for the present, until the Norris Dam is completed. After that, we hope we can make some arrangement for a division of territory."

"Mr. Thurston: Will you build dams first, or will you make the division before you build the dams?"

"Dr. Morgan: We are building the dams."

.

"Dr. Morgan: * * * This project is an effort to set up a governmental development of power, and, if that is adopted, it seems to me a reasonable set-up that it should not be hamstrung and so limited that it is bound to fail."

"* * * We are trying to set up a unit that will be comparable to a well-managed private unit. It requires an adequate area. * * * I hope we can help to establish a policy for the power industry."

.

"As I said this morning, if this project is to work at all, it must have some area to work in. We must in some way [fol. 341] acquire an area to work in, either by setting up competing facilities to the present facilities, or by purchasing the facilities of present utilities."

.

"In our opinion, if we can carry through the program we have, we may cause a temporary disadvantage to the

immediate power interests around there—to the companies immediately surrounding us. We are trying to make arrangements with them to purchase their utilities. This project is an effort to set up a governmental development of power, and, if that is adopted, it seems to me a reasonable set-up that it should not be hamstrung and so limited that it is bound to fail. . . .

"We are trying to take them over. We were in negotiation with the Commonwealth & Southern, and we have come to an agreement; as the other plants come into operation, we ought to take over more.

.
 "Mr. Bacon: In purchasing these transmission lines, you have come to an agreement with the companies, but it is really an agreement under duress, is it not, because if they did not sell to you, you would duplicate their lines?

"Dr. Morgan: Yes."

"Mr. Bacon: So they were compelled to sell?

"Dr. Morgan: Yes—they were not obliged to; they could take the other course.

"Mr. Bacon: I understand.

"Dr. Morgan: Here we have a project as a whole. This project is for a yardstick for power, taking the set-up here. If there is no place to sell that power it is not a project, but only an idea. We have to see this as a whole, or else we cannot achieve it at all.

"Mr. Bacon: I understand the necessity for taking over their transmission lines, but they were forced to sell to you because if they did not sell to you, you would put power lines in and put them out of business.

"Dr. Morgan: We are not going to sell power unless we sell it somewhere.

[fol. 342] "Mr. Bacon: Naturally, they will make the best deal with you that they can, of course.

"Dr. Morgan: I hope they will deal with us. We are carrying on some negotiations where the course is not so smooth.

"Mr. Bacon: If you hold a man up with a pistol, if he can get off with half of his possessions, he is going to do it."

30. On June 1, 1934 Defendant TVA released to the press:

"The Authority is under duty to acquire a market for its power. . . . It is authorized to compete with exist-

ing utilities, and for this purpose, expressly empowered to erect duplicate facilities."

31. On July 6, 1934 Defendant TVA released to the press:

" 'There are only two alternatives open to the people of North Alabama,' Mr. Lilienthal said. 'The first is to build duplicate and competing plants with the delay involved in getting construction under way and with the expense of acquiring enough customers to insure financial success.

" 'We believe that the communities would get 100 per cent of the business because of the lower rates and because of the loyalty of the people of these communities.

" 'The results of this alternative clearly, would be to render valueless the lines, poles, transformers, etc., which are now owned by the Alabama Power Company. This property is useful and has a value at the present time to the people of the community.' "

32. On January 13, 1935 Defendant A. E. Morgan stated in an address at Swarthmore College, released on January 14, 1935 to the press by Defendant TVA:

"Private initiative and rugged individualism showed no sense of social responsibility, no evidence of planning. If we can develop the Tennessee Valley as a unified system we can do it at half the cost of private management. Public control is essential to prevent a great social and economic waste."

[fol. 343] 33. In March, 1935, Defendant Morgan stated in a magazine article entitled, "Selfish Interests Must Go", published in The Forum, p. 131:

"The program is under way. Whether it indicates that government ownership and operation are superior to private or vice versa, I believe events should determine. I believe that criticism of that program ought always to be free. I think, however, that criticism ought to be fair; and wherever there is an effort to misrepresent, to cloud the issue, to mislead the public and so to discredit such an undertaking because certain investors might suffer—there I think we have one of the evidences of how hard it is to establish anything new in our lives. Dividends have been paid through the years on securities which represent no outlay of money, and yet there is resentment at the sug-

gestion that these imaginary values should be written off. This is an illustration of the difficulty of instituting the New Deal.

• • • • •

"Wherever we turn we find that things as they are have become the basis of some personal interest. All the disabilities of our economic system have been taken advantage of in some way. For instance, go to a small town and you will commonly find five times as many merchants as are necessary. Four out of five are economic parasites. If that town could reorganize itself and have one fifth as many merchants and have the other four fifths of its leading citizens doing other services—taking care of the public health of the community, establishing dental and medical clinics, giving vocational guidance to the young people—we would have a better town. If the town can support five times as many people serving the public as are necessary to run its stores, why not support people performing necessary services rather than people who are duplicating services which are already being performed? And yet, whenever any organization has made an effort to eliminate a superfluity of personnel in any field, there is at once the cry that it is interfering with private interests.

• • • • •

"As a small boy, I heard a story about how the East Indians catch monkeys. According to the story, they take a coconut and cut a hole in it barely big enough for the [fol. 344] monkey's empty hand to pass through. In it they place some lumps of sugar and then fasten the coconut to a tree. The monkey squeezes his hand inside the coconut and grasps the sugar and then tries to draw out his fist. But the hole is not large enough for his closed fist to go through, and greed is his undoing, for he will never give up the prize.

"American business to some degree is in the same situation. It is not yet willing to give up the sugar. Only so far as it becomes willing to relinquish this grasp can the New Deal survive and be a reality."

34. On October 17, 1933 Defendant Lilienthal stated in a speech at Memphis, Tennessee, later released to the press by Defendant TVA:

"To you who are investors in public utility securities, I want to speak very frankly: After long deliberation, a national policy has been determined upon whereby a limited example of public operation of the power business is to be set up and to be given a chance to show what it can do. This is now the nation's policy."

35. On November 7, 1933 Defendant Lilienthal stated in a speech at Nashville, Tennessee, later released to the press by Defendant TVA:

"In order to fully understand the reasons for the power program set out in the Tennessee Valley Authority Act, it is necessary to recall what has been happening in the United States during the past ten years. It is necessary to understand that the people back home have become thoroughly aroused and that they are determined that the disgrace which was cast upon the electric industry during the past decade, and the losses which have been visited upon investors in public industries is not to be repeated.

"You are all thoroughly familiar with the sordid story. I need not recall to your minds the quarter of a million dollars which Samuel Insull paid to the Chairman of the Illinois Public Utilities Commission. Those of you who are investors in public utility securities are familiar with the story of gross inflation, of the pyramiding of stocks, or write-ups, of bonuses, of the purchase of isolated utility plants at outrageous and unreasonably high figures and the issuance of securities on the basis of such prices. Instances of these practices can be cited to you almost from coast to coast.

[fol. 345] "I have no desire to intimate that every important executive in the public utility business followed such practices, but there can be no question that in the last decade the dominate power was in the hands of financial pirates and free-booters."

36. On January 5, 1934 Defendant TVA released to the press:

"The essence of this agreement is a recognition by the power companies who were parties to the arrangement that

the TVA is under a duty to operate a public power business, directly and through public agencies."

37. In January, 1934, Defendant A. E. Morgan stated in an article entitled "The Tennessee Valley Authority", published in *Scientific Monthly* at page 64 (Address to the National Academy of Sciences, Massachusetts Institute of Technology, Cambridge, November 20, 1933):

"Another object of the Tennessee Valley Authority is to make this region and the country as a whole more fully aware of the vast possibilities of electric power for enlarging the freedom and scope of modern life in the home and on the farm. This can only come with cheap power, from which all speculation and exploitation have been removed. The electric power business is one of the simpler industries of our country. It does not compare in complexity with the shoe industry, the automobile industry or the railroad industry. No vast tribute should be paid for management and financing. Brought down to its simpler necessities, electric power should be a universal convenience, supplied as city water supplies usually are, on a basis of service and not of commercial exploitation."

38. In March, 1934, Defendant A. E. Morgan stated, in an article entitled, "Purposes and Methods of the Tennessee Valley Authority", published in *The Annals of The American Academy of Political and Social Science* (Vol. 172 pp. 53, 54):

"Outside Ownership of Utilities

"And let me divert right here to the matter of electric power. The utilities of that region are not largely owned locally. There is some preferred stock scattered around the country, mostly, it would appear, to widows and orphans. [fol. 346] While the Tennessee Valley Authority law was in Congress, a large number of letters were received at the Capitol protesting against the passage of the law. They largely came from holders of the preferred stock and I think two thirds of them came from widows and orphans. I have a collection of possibly a hundred of those letters. I have wondered what economic accident it is that causes such a backlog of widows and orphans for the utilities to appeal to for public support.

"Possibly 10 or 20 per cent of the ownership of the local utilities is in that region. The rest is outside; the control is outside, the dividends largely go outside to our large centers. The region exports money. A country that does too much of that is going to be in trouble."

.

"* * * We are taking the position that unless there is some necessary element of service rendered, foreign ownership is destructive to a community and its elimination is a sound element in social and economic planning."

39. In March, 1934, Defendant A. E. Morgan, in an article entitled, "Bench-Marks in the Tennessee Valley, II A Birch Rod in the National Cupboard," published in 23 Survey Graphic, stated at pages 105, 110:

"For the government to have a genuine 'yardstick' for power it must generate and sell power on such a scale that the operation can be representative of efficient management. Fortunately for this program, the drainage area of the Tennessee River, with certain limited areas and cities in addition, constitutes such a unit. At present it is almost an independent area, and can be treated as a unit with very little adjustment of physical facilities. The TVA, therefore, plans through a period of years to treat this region as a unit of power supply, and to attempt to demonstrate what is the normal and reasonable cost of electric power. Its general plan is to generate and transmit power to the individual communities, encouraging them to own and operate their own municipal or community distributing systems. The TVA will furnish engineering and accounting advice and supervision. In this way the communities can have the advantage of large-scale low-cost generation and transmission and also the advantage of local public ownership. For such a program, a fairly large area of operation is necessary."

[fol. 347] 40. On April 21, 1934 Defendant Lilienthal stated in a speech at Chattanooga, Tennessee, released to the press on April 22, 1934 by Defendant TVA:

"Perhaps the most important factor in insuring a low cost for hydro-electric power in this region is the fact that the distribution of this power to the factories and homes

and farms, for the most part, will be in the hands of public agencies. Industries seeking to use large blocks of hydro-electric power in the Tennessee Valley will not be forced to support dizzy towers of inflated capitalization. They will not have to pay for the financial misdeeds of the builders of utility pyramids. Under public distribution of power with centralized accounting, control and supervision in the hands of a regional authority, there will be the greatest incentive to economy and managerial efficiency. Each community will try to make its record better than that of its neighboring community."

41. On April 24, 1934 Defendant Lilienthal stated in a speech at Boston, Mass., released to the press on April 25, 1934 by Defendant TVA:

"Now this is what had been going on throughout the United States—financial excesses, political corruption, an enforced frugality in the use of a great natural resource."

.

"Twenty million American homes are to be denied the full benefits of a great national resource in order that inflated stock may pay out."

42. On June 13, 1934 Defendant Dr. Morgan stated in his testimony before the Sub-committee of the Committee on Appropriations, U. S. Senate:

"Senator Dickinson: And, if it takes \$300,000,000 to put in or make this experiment on behalf of the citizens involved here, might I inquire if you would state what you would think it would take from the public treasury and the taxpayers of the United States to help the people in the rest of the United States under a similar program?"

"Dr. Morgan: Most of that \$300,000,000 is for power development, and will be gradually repaid out of revenues. I [fol. 348] think it will cost the taxpayers of America altogether less than it is now costing in the rest of the United States. For instance, in Knoxville, the people now are paying a certain rate for electric power. We believe that we can cut that rate decidedly and yet that the people can pay for their entire installation in 10 years out of the rest. That is, the rates they are paying now are so excessive, the taxes they are paying, in the form of electric rates now are so ex-

cessive that we can cut that 30 per cent and yet out of the rest of it that they can pay the whole thing back in 10 years.

"Senator Dickinson: It seems to me that is a tremendous indictment of all of the authorities that have had anything to do with the supervision of electric rates in any of the localities or States where you happen to be distributing power.

"Dr. Morgan: I am not commenting on that statement."

43. On June 22, 1934 Defendant Lilienthal stated in a speech at Jackson, Tennessee, later released to the press by Defendant TVA:

"I am not an alarmist, but I want to warn you that powerful forces are at work to deprive the South of the greatest opportunity which ever came to any people. A year ago the disciples of greed and blindness that brought this country to the verge of a collapse had hurried into the storm cellars, whimpering and crying for help. * * *

"The people of the country must choose whether to follow the leadership of the President or the leadership of the selfish and blind that brought us so close to destruction.

"The first great test is in your hands here in the Tennessee Valley. Under the cover of various disguises, powerful forces are at work to destroy the long-time objectives of the Tennessee Valley Authority. In order to fill their own pocket, these powerful groups are ready at any cost to destroy the Tennessee Valley Authority's program and to keep the President's objectives from being fulfilled."

[fol. 349] Complainants are informed and believe that numerous other similar representations have been made by the several Defendants, but Complainants are not now in possession of the precise particulars with reference thereto.

For further and better particulars of the allegations set forth in Paragraph XXIV of the Bill of Complaint, Complainants herein say that they are advised and believe and therefore allege that whether the Tennessee Valley Authority Act as amended purports, when properly construed, to authorize the various acts of the Defendants set forth in the Bill and of which complaint is made a question of law, that all of said acts of the Defendants are either unauthorized by the Tennessee Valley Authority Act as amended, when properly construed, or said Act is to that extent unconstitu-

tional and void for the reasons set forth in Paragraph XXV of the Bill, that Complainants are in doubt whether there are any of said acts other than those set forth in Paragraph XXIV of the Bill which said statute does not attempt to authorize, and that therefore the Complainants are unable further to particularize which of said acts other than those already specified in Paragraph XXIV of the Bill are not attempted to be authorized by the Tennessee Valley Authority Act as amended, when properly construed.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants.

I certify that a copy of the foregoing has been delivered to opposing counsel.

Aug. 6, 1936.

(S.) Charles D. Snapp.

[fol. 350] IN UNITED STATES DISTRICT COURT

(Caption omitted)

STIPULATION RE CERTAIN OFFERS IN EVIDENCE—Filed August 14, 1937

Whereas, both the plaintiffs and the defendants during the course of the trial will or may have occasion to offer in evidence public records, reports or other documents; and

Whereas, both the plaintiffs and defendants desire to conserve the time of the Court, to avoid unnecessary costs and expenses and to expedite the trial insofar as possible;

It is Hereby Stipulated as follows:

1. That any printed copy of the following classes of printed documents: House Documents, Senate Documents, Official Reports to the President of the United States by appointed committees, Executive Orders, Official Reports to Congress, Official Reports of Cabinet Officers of the United States, Congressional Hearings, Reports of Congressional Committees, Congressional Records, and all documents showing upon their face that they were printed by the U. S. Government Printing Office, may be offered in evidence without further proof of its authenticity and without further

proof that the said printed copy is accurate and what it purports to be, all further proof of the genuineness and authenticity of said documents being expressly waived.

[fol. 351] 2. That any officially printed copy of any document officially published by any State, or Department of such State, or of any report or survey by official research and investigating bodies of any of the various States, bearing in print upon its face identification as such, may be offered in evidence without further proof of its authenticity and without further proof that it is a correct and accurate copy of what it purports to be, all further proof of authenticity being expressly waived.

3. That Hal H. Clements, Jr., Special Master, shall request from the Mississippi River Commission copies of the following records and data and that such records and data so received by him and transmitted to the Court may be offered or used in evidence by any of the parties without further proof that they are correct and accurate copies of what they purport to be, all further proof of authenticity being expressly waived.

Daily hydrographs for the Mississippi River at Belmont, Mo., for the years 1895 to 1902, inclusive;

Daily hydrographs for the Mississippi River at Columbus, Ky., for the years 1903 to 1927, inclusive;

Daily hydrographs for the Mississippi River at Hickman, Ky., for the years 1928 to 1932, inclusive;

Stream flow records for the Mississippi River in the vicinity of Cairo, Illinois, for whatever period these data may be available.

4. That on or before September 15, 1937, counsel for plaintiffs will deliver to counsel for defendants:

(a) Copies of all corporate charters, franchises, licenses, certificates of convenience and necessity and privileges of any of the original plaintiffs, or their predecessors, from the United States or any State, county, or municipality or any State regulatory body;

(b) Copies of any declaration of intention to construct dams and project works filed with the Federal Power Commission, any preliminary permits issued by the Federal Power Commission for the construction of dams and proj-

ect works, any applications to, licenses and amendments to licenses, granted by the Federal Power Commission, and any instruments acknowledging compliance with the provisions of licenses by the Federal Power Commission or any other Department of the United States or officer thereof; and

[fol. 352] (c) Copies of any certificates, licenses, instruments of approval or other authorizations or acknowledgments issued, made or granted by any Department of the United States, or officer thereof, respecting any dams or hydroelectric plants, or respecting the construction of any dams or hydroelectric plants of the original complainants;

and that the same may be offered in evidence without further proof of their authenticity and without further proof that they are correct and accurate copies of what they purport to be, all further proof of authenticity being expressly waived.

5. That on or before September 1, 1937, counsel for the plaintiffs will deliver to counsel for the defendants copies of the following documents, to wit:

(1) Speech delivered by C. A. Collier, Vice President of the Georgia Power Company, to the Southeastern Electrical Exchange Conference at Savannah, Georgia, on March 29, 1934.

(2) Speech delivered by F. A. Newton to the Convention of the Edison Electrical Institute on June 7, 1934 at Atlantic City, New Jersey.

(3) Speech delivered by F. A. Newton to the Convention of the Edison Electrical Institute on June 8, 1934 at Atlantic City, New Jersey.

(4) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at a meeting of the Investment Bankers Association at New York City on October 31, 1934.

(5) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, to the Rotary Club at Birmingham, Alabama, on November 7, 1934.

(6) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, to the Economic Club in New York City on January 21, 1935.

(7) Speech delivered by J. A. Longley, Vice President and General Manager of the Tennessee Electric Power Company, at Chattanooga, Tennessee, on January 29, 1935.

(8) Speech delivered by J. A. Longley, Vice President and General Manager of the Tennessee Electric Power Company, at the University of Chattanooga, Chattanooga, Tennessee, on February 26, 1935.

(9) Statement made by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in the House of Representatives at Washington, D. C., on March 14, 1935.

(10) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, to the Chamber of Commerce Convention at Washington, D. C., on May 1, 1935.

(11) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at the Town Hall Club, New York City, on December 4, 1935.

[fol. 353] (12) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in New York Times, under date of December 4, 1935.

(13) Statement by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Forbes Magazine under date of December 15, 1935.

(14) Speech delivered by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at the New York Bond Club, New York City, December 20, 1935.

(15) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in the Wall Street Magazine under date of December 21, 1935.

(16) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Barrons Magazine under date of December 23, 1935.

(17) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Edison Electrical Institute Bulletin under date of January, 1936.

(18) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Public Utilities Fortnightly under date of January 30, 1936.

(19) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Journal of Land & Public Utility Economy under date of February, 1936.

(20) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in New York Herald Tribune under date of February 19, 1936.

(21) Press release by Wendell Wilkie, President of the Commonwealth & Southern Corporation, under date of February 24, 1936.

(22) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in News Review under date of February 24, 1936.

(23) Quoted remarks by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Literary Digest under date of February 29, 1936.

(24) Radio address by Wendell Wilkie, President of the Commonwealth & Southern Corporation, over NBC Network on March 5, 1936.

(25) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Public Service Magazine for April, 1936.

(26) Statement of T. W. Martin, President, Alabama Power Company, before the House Ways and Means Committee of the Alabama Legislature, April, 1936.

(27) Statement by T. W. Martin, President, Alabama Power Company, to stockholders of the Alabama Power Company under date of April 9, 1936.

(28) Speech by Wendell Wilkie, President of the Commonwealth & Southern Corporation, over Radio Station WABC on April 15, 1936.

(29) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Electrical Institute Bulletin under date of May, 1936.

[fol. 354] (30) Statement by T. W. Martin, President, Alabama Power Company, issued at Birmingham, Alabama, under date of May 4, 1936.

(31) Address by T. W. Martin, President, Alabama Power Company, in Mobile Times under date of May 6, 1936.

(32) Report by Wendell Wilkie, President of the Commonwealth & Southern Corporation, to stockholders of Commonwealth & Southern Corporation under date of May 22, 1936.

(33) Article by P. S. Arkwright, President of the Georgia Power Company, in Forbes Magazine under date of June 1, 1936.

(34) Speech by Wendell Wilkie, President of the Commonwealth & Southern Corporation, under date of June, 1936, delivered at Annual Conference of Mutual Savings Banks.

(35) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Financial World under date of June 3, 1936.

(36) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in Public Service Magazine, June, 1936.

(37) Speech by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at Chattanooga, Tennessee on June 15, 1936.

(38) Statement by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at Chattanooga, Tennessee on June 18, 1936.

(39) Article by J. C. Guild, Jr., President of the Tennessee Electric Power Company, in Public Utilities Fortnightly, under date of July 2, 1936.

(40) Article by J. C. Guild, Jr., President of the Tennessee Electric Power Company, under date of July 3, 1936.

(41) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, under date of July 12, 1936.

(42) Article by P. S. Arkwright, dated July 12, 1936.

(43) Article by J. C. Guild, Jr., President of the Tennessee Electric Power Company, under date of August 18, 1936.

(44) Speech by T. W. Martin, President, Alabama Power Company, at Birmingham, Alabama, August 19, 1936.

(45) Release by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at Washington, D. C., September 18, 1936.

(46) Release by Wendell Wilkie, President of the Commonwealth & Southern Corporation, at Washington, D. C., September 22, 1936.

(47) Letter from J. C. Guild, Jr., President of the Tennessee Electric Power Company, to stockholders of the Tennessee Electric Power Company, dated September 30, 1936.

(48) Letter from T. W. Martin, President, Alabama Power Company, to stockholders of the Alabama Power Company, dated October 1, 1936.

[fol. 355] (49) Statement by Wendell Wilkie, President of the Commonwealth & Southern Corporation, issued at Washington, D. C., October 1, 1936.

(50) Article by T. W. Martin, President, Alabama Power Company, in *Manufacturers Record*, October, 1936.

(51) Article by C. W. Kellogg, President of the Edison Electrical Institute, in *New York Journal of Commerce*, October 8, 1936.

(52) Speech by C. W. Kellogg, President of the Edison Electrical Institute, to the Philadelphia Association of Security Salesmen at University Club, Philadelphia, Pa., on October 22, 1936.

(53) Speech by C. W. Kellogg, President of the Edison Electrical Institute, to the Investment Bankers Association of Augusta, Georgia, on December 6, 1936.

(54) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, under date of January 3, 1937, in *New York Times*.

(55) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in the *Annalist* under date of January 8, 1937.

(56) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in *Electrical World* under date of January 9, 1937.

(57) Press release by T. W. Martin, President, Alabama Power Company, under date of January 15, 1937.

(58) Article by Wendell Wilkie, President of the Commonwealth & Southern Corporation, in United States News under date of January 21, 1937.

(59) Statement by Wendell Wilkie, President of the Commonwealth & Southern Corporation, on the Cancellation of the Power Pool under date of January 27, 1937.

(60) Announcement made by Wendell Wilkie, President of the Commonwealth & Southern Corporation, on February 3, 1937, that the Commonwealth & Southern Corporation had decided to allow the Tennessee Valley Authority contract to expire.

(61) Statement by Wendell Wilkie, President of the Commonwealth & Southern Corporation, on February 4, 1937, that the Commonwealth & Southern Corporation had decided to allow Tennessee Valley Authority contract to expire.

(62) Sixty page discussion on Power Pool Problem, and related problems, issued by Commonwealth & Southern Corporation on February 17, 1937.

(63) Speech by P. S. Arkwright before Augusta Rotary Club, Augusta, Georgia, on May 25, 1937.

(64) Speech by C. W. Kellogg, President of the Edison Electrical Institute, before the Edison Electrical Institute, Chicago, Illinois, in June, 1937.

(65) Statement by P. S. Arkwright before Georgia Public Service Commission on July 13, 1937.

[fol. 356] (66) Statement issued by T. W. Martin, President, Alabama Power Company, published in the Birmingham Age-Herald, Birmingham, Alabama, July 22, 1937.

together with all newspaper advertisements or published statements relating to the Tennessee Valley Authority or any rural electrification group or association served or proposed to be served by it, or relating to any of the officers or directors of the Tennessee Valley Authority, published or paid for by any of the original complainants, by the Commonwealth & Southern Corporation, or the Electric Bond &

Share Corporation or any director or officer of any of said companies.

It is further agreed that counsel for the plaintiffs will deliver to counsel for the defendants, upon demand, copies of any additional specified documents or papers of the same general type as those listed above. On or before September 1, 1937, counsel for the defendants will deliver to counsel for the plaintiffs copies of all annual or other official reports to Congress, published speeches, published articles, or advertisements, or press releases, of any of the defendants, or any of their respective directors or officers. Any of the documents described in this paragraph may be offered in evidence without further proof of their authenticity and without further proof that they are correct and accurate copies of what they purport to be, all further proof of authenticity being expressly waived.

6. It is expressly agreed that this Stipulation shall in nowise preclude either the plaintiffs or the defendants from objecting to the introduction in evidence of any such report, record, or document by reason of its irrelevancy, immateriality or incompetency upon any other ground or grounds than lack of proof of authenticity. Nothing contained herein shall be construed as a waiver of any privilege that may exist as to confidential communications or official documents.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Plaintiffs.
James Lawrence Fly, Solicitor for Defendants.

[fol. 357] IN UNITED STATES DISTRICT COURT

(Caption omitted)

SUGGESTION THAT ACT OF CONGRESS OF AUGUST 24TH, 1937
REQUIRES APPLICATION TO SENIOR OR PRESIDING CIRCUIT
JUDGE FOR DESIGNATION OF TWO ADDITIONAL JUDGES TO
HEAR CAUSE—Filed August 28, 1937

To the Honorable John J. Gore, United States District
Judge:

With reference to the above entitled cause now pending
before you by designation, in the United States District

Court for the Eastern District of Tennessee, we respectfully call your attention to the following situation:

On the 24th day of August instant, the President approved a recently passed Act of Congress entitled "An Act to Provide for Intervention of the United States, Direct Appeals, etc."; and such Act is now in full force and effect. Section 3 thereof provides, among other things, that "No interlocutory or permanent injunction suspending or restraining the enforcement, operation, or execution of, or setting aside in whole or in part any Act of Congress, upon the ground that such Act or any part thereof is repugnant to the Constitution of the United States, shall be issued" except upon the conditions in such section specified. In our judgment, the injunction sought in this case upon the final hearing is sought in part, though not wholly, upon the ground thus specified in Section 3, and therefore the conditions thereof become applicable, and plaintiff's application for such injunction (which application exists by the pendency of the final hearing) must be heard and determined by three judges, as in this section specified.

We therefore respectfully suggest that you immediately request that the Senior Circuit Judge, or in his absence, the Presiding Circuit Judge of this Circuit, designate two other judges to participate in hearing and determining such application.

For your convenience, and subject to your approval, we hand you herewith a draft of such request for your use for that purpose.

Respectfully, Baker, Hostetler, Sidlo & Patterson,
Trabue, Hume & Armistead, Frantz, McConnell &
Seymour, by Charles D. Snapp, Solicitors for Com-
plainants.

(For brevity the draft of the request for designation of additional Judges is omitted.)

[fol. 358] IN UNITED STATES DISTRICT COURT

(Caption omitted)

AMENDMENT TO STIPULATION OF AUGUST 14, 1937—Filed Sept. 2, 1937

It is agreed that the stipulation filed in this cause on August 14, 1937 be amended so as to show that the defendants have requested the plaintiffs to deliver to counsel for the defendants copies of the following documents, subject to the terms and provisions of said stipulation:

1. All reports to stockholders issued by any of the original plaintiffs during the period between January 1, 1927 and the present date.

2. A copy of the application of The Tennessee Electric Power Company to the State Railroad and Public Utilities Commission of Tennessee, for permission to issue bonds for the purpose of building a steam plant near Nashville, Tennessee.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles D. Snepp, Solicitors for Plaintiffs. William C. Fitts, Jr., Solicitor for Defendants.

[fol. 359] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION TO COMPEL DEFENDANTS TO PRODUCE DOCUMENTS AND PERMIT INSPECTION THEREOF—Filed September 20, 1937

Now come the Complainants in the above entitled cause by their solicitors and move this Court for an order compelling Defendants herein to produce and permit the Complainants to inspect in advance of trial the documents hereinafter described in Exhibit A, hereto attached and made a part hereof, in said Defendants' possession or under their control, containing evidence material to the cause of action of Complainants and admissible in evidence herein, as more fully appears from the affidavit of Charles M. Seymour, hereto attached as Exhibit B and made a part hereof.

Baker, Hostetler, Sidlo & Patterson Trabue, Hume Armistead, Frantz, McConnell & Seymour, Solicitors for Complainants.

A copy of this motion and exhibits has been delivered to the solicitor for defendants.

Frantz, McConnell & Seymour, by Charles D. Snepp.

[fol. 360] EXHIBIT "A" TO MOTION TO PRODUCE DOCUMENTS,
ETC.

Records of Tennessee Valley Authority Comprising Engineering Data, Maps, Drawings, Charts, Graphs, Tabulations, Surveys and Reports With Respect to the Dam Construction or Reservoir of Each of the Dams now Constructed or to Be Constructed by Tennessee Valley Authority Named in the "Unified Plan" Submitted to Congress on March 31, 1936, as Follows:

1. Norris Dam:

(a) Scale drawing showing general plan of Norris Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of bottom of dam, elevation of center line of slide gates, dimensions of slide gates, elevation of top of overflow section, and elevation of top of gates.

(d) Volume area curves for Norris Dam Reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of non-overflow section of dam, showing elevation of center line of penstock and top of dam.

(f) Drawing showing downstream elevation of dam with overall dimensions, length of spillway, length and number of gates, and length of non-overflow sections.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Norris Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

[fol. 361] 2. Hiwassee Dam:

(a) Scale drawing showing general plan of Hiwassee Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of bottom of dam, elevation of center line of slide gates, dimensions of slide gates, elevation of top of overflow section, and elevation of top of gates.

(d) Volume area curves for Hiwassee Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of non-overflow section of dam, showing elevation of center line of penstock and top of dam.

(f) Drawing showing downstream elevation of dam with overall dimensions, length of spillway, length and number of gates, and length of non-overflow section.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Hiwassee Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

3. Fontana Dam:

(a) Scale drawing showing general plan of Fontana Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

[fol. 362] (c) Drawing of section through overflow part of dam showing elevation of bottom of dam, elevation of center line of slide gates, dimensions of slide gates, elevation of top of overflow section, and elevation of top of gates.

(d) Volume area curves for Fontana Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of non-overflow section of dam showing elevation of center line of penstock and top of dam.

(f) Drawing showing downstream elevation of dam with overall dimensions, length of spillway, length and number of gates, and length of non-overflow sections.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of Fontana Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

4. Coulter Shoals Dam:

(a) Scale drawings showing general plan of Coulter Shoals Dam and Power House.

(b) Contour map of reservoirs area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates and elevation of bottom of dam.

(d) Volume area curves for Coulter Shoals reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam.

[fol. 363] (f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Coulter Shoals Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

5. Watts Bar Dam:

(a) Scale drawings showing general plan of Watts Bar Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates and elevation of bottom of dam.

(d) Volume area curves for Watts Bar Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

[fol. 364] (i) Complete set of land maps comprising the land map of Watts Bar Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

6. Chickamauga Dam:

(a) Scale drawings showing general plan of Chickamauga Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates and elevation of bottom of dam.

(d) Volume area curves for Chickamauga Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Chickamauga Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

[fol. 365] 7. Guntersville Dam:

(a) Scale drawings showing general plan of Guntersville Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates, and elevation of bottom of dam.

(d) Volume area curves from Guntersville Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam and bottom of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Drawing of section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Guntersville Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

8. General Joe Wheeler Dam:

(a) Scale drawings showing general plan of General Joe Wheeler Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates, and elevation of bottom of dam.

[fol. 366] (d) Volume area curves for General Joe Wheeler Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Section through non-overflow part of dam showing elevation of top of dam and bottom of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the General Joe Wheeler Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

9. Wilson Dam:

(a) Scale drawings showing general plan of Wilson Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gates and elevation of bottom of dam.

(d) Volume area curves for Wilson Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam and bottom of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Section through power house showing center line of waterway, number of units, size of water wheel and generator installation in kw. and kva.

[fol. 367] (h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Wilson Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

10. Pickwick Landing Dam:

(a) Scale drawings showing general plan of Pickwick Landing Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gate, and elevation of bottom of dam.

(d) Volume area curves for Pickwick Landing Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam and bottom of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Drawing of section through power house showing center line of penstock, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of the Pickwick Landing Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

[fol. 368] 11. Gilbertsville Dam:

(a) Scale drawings showing general plan of Gilbertsville Dam and Power House.

(b) Contour map of reservoir area showing contours by 10 ft. elevations from elevation of bottom of dam up to elevation of top of gates.

(c) Drawing of section through overflow part of dam showing elevation of top of dam, elevation of top of gate, and elevation of bottom of dam.

(d) Volume area curves for Gilbertsville Dam reservoir from elevation of bottom of dam up to elevation of top of gates.

(e) Drawing of section through non-overflow part of dam showing elevation of top of dam and bottom of dam.

(f) Drawing showing downstream elevation of dam with general overall dimensions, length of spillway section, length and number of gates, and elevation of roadway.

(g) Drawing of section through power house showing center line of waterway, number of units, size of water wheel and generator installation in kw. and kva.

(h) Drawing showing navigation lock with dimensions of length, width and height of lock, elevations of upper and lower miter and guard sills, dimensions of upper and lower gates and size of filling and emptying culverts.

(i) Complete set of land maps comprising the land map of Gilbertsville Dam reservoir.

(j) All daily reports on stream flow, rainfall storage and pond elevations prepared by Tennessee Valley Authority.

[fol. 369] Engineering and Technical Data Prepared by or in the Possession of Tennessee Valley Authority Relating to the Generation, Transmission or Distribution of Electricity, Tennessee Valley Authority Department of Electricity, or Costs of Program.

1. All maps, drawings, sketches, tabulations and data showing transmission, distribution or rural electric lines, the respective mileage of each of said lines, the capacity thereof, date the construction began and date line was energized, constructed or now under construction by Tennessee Valley Authority under contract or otherwise.

2. All maps, drawings, sketches, tabulations and data showing transmission, distribution or rural electric lines, the respective mileage of each of said lines, the capacity thereof, and proposed date of construction, proposed to be constructed or projected for construction by Tennessee Valley Authority under contract or otherwise.

3. All maps, drawings, sketches, tabulations and data showing transmission, distribution or rural electric lines, the respective mileage of each of said lines and the capacity thereof and the date of acquisition, acquired from municipalities or privately owned public utilities by Tennessee Valley Authority.

4. All maps, drawings, sketches, tabulations and data showing the location, date of acquisition of site, type capacity and structural design of each of the sub-stations that have been or are now being constructed by Tennessee Valley Authority or which are proposed to be constructed by said Authority or which have been or are now proposed to be acquired by said Authority from other governmental agencies or privately owned public utilities in any of the states of Tennessee, Alabama, Kentucky, Georgia or Mississippi since the date of the organization of said Authority.

5. All surveys made by Tennessee Valley Authority or by any municipality, cooperative electric association or other governmental agency or agencies or individual or group of individuals and furnished to said Tennessee Valley Authority showing potential consumer demand and number of potential customers in any area comprising a part of any of the states of Tennessee, Alabama, Kentucky, Georgia or Mississippi together with all estimates or tabulations made by Tennessee Valley Authority of the cost of constructing lines to said areas and serving said areas or any of them, and estimated revenues therefrom.

6. All surveys made by Tennessee Valley Authority or by any individual, corporation, association or agency, either

public or private, and furnished to Tennessee Valley Authority of any of the customers of any of the Complainants, together with any estimates relating thereto showing the consumer demand, cost of service to or revenues from said customers or any of them.

7. Books and records of Tennessee Valley Authority showing:

[fol. 370] (a) The number of employees in the Department of Electricity as of January 1, 1937 and as of September 15, 1937;

(b) The names, addresses, position or duties and salary or rate of compensation of each of said employees as of January 1, 1937 and September 15, 1937; and

(c) Date of first employment of each of said employees.

8. All reports, estimates or tabulations submitted to or made by the Directors of Tennessee Valley Authority, or any of them or any of the Defendants, in reference to Wilson Dam, Norris Dam, Wheeler Dam, Pickwick Landing Dam, Gilbertsville Dam, Gunterville Dam, Chicamunga Dam, Watts Bar Dam, Coulter Shoals Dam, Hiwassee Dam, Fontana Dam and Hales Bar Dam, or any of them, showing allocations or tentative allocations of the cost or value of each of said Dams to electric power development, navigation, flood control, fertilizer manufacture and national defense.

9. The allocations of the value of Wilson Dam as taken over by Tennessee Valley Authority between flood control, navigation, electric power development, fertilizer manufacture and national defense (a) approved by the Board of Directors of Tennessee Valley Authority and submitted to the President of the United States, and (b) approved by the President and returned to the Tennessee Valley Authority.

10. The separate allocations of the costs of Norris Dam and Joe Wheeler Dam, or either of them, between flood control, navigation, electric power development, fertilizer manufacture and national defense (a) approved by the Board of Directors of Tennessee Valley Authority and submitted to the President, and (b) approved by the President and returned to said Tennessee Valley Authority.

11. The books and records of Tennessee Valley Authority showing payments to the states of Alabama and Tennessee on account of the sale of electric power generated at any of the dams of Tennessee Valley Authority for each of the years 1933 to date.

12. The books and records of Tennessee Valley Authority showing the cost of generation, transmission and distribution of electric energy produced by said Authority for each of the years from 1933 to date and the total cost of generating, transmission and distribution facilities constructed or acquired by said Authority in each of said years.

13. The books and records of Tennessee Valley Authority showing the total sum paid or expended to date to electrical contractors or potential users of electricity in any [fol 371] of the states of Tennessee, Alabama, Kentucky, Georgia or Mississippi as an allowance to assist in defraying the cost of wiring the house or buildings of any prospective electric consumer by reason of said consumer's agreement to install an electric range or water heater or both.

14. All reports of operations or earnings and all financial statements furnished or delivered to Tennessee Valley Authority by any cooperative electric association or municipality purchasing electric energy from Tennessee Valley Authority, specifically including the cooperative electric associations and municipalities hereinafter named, to wit:

Municipalities

Alabama	Tennessee	Mississippi
Athens	Bolivar	Amory
Birmingham	Chattanooga	Holly Springs
Cherokee	Clinton	New Albany
Courtland	Columbia	Okolona
Decatur	Dayton	Tupelo
Florence	Dickson	
Hartselle	Jackson	
Muscle Shoals	Johnson City	
Russellville	Knoxville	
Sheffield	Lenoir City	
Tuscumbia	Lewisburg	
	Memphis	
	Milen	

Municipalities—Continued

Georgia	Tennessee	Kentucky
Cartersville	Nashville	Louisville
Dalton	Newbern	Middlesboro
Lafayette	Paris	
	Pulaski	
	Somerville	
	Trenton	

Cooperative Electric Power Associations

Alcorn County Elec. Power Assn.
 Prentiss County Elec. Power Assn.
 Monroe County Elec. Power Assn.
 Tishomingo County Elec. Power Assn.
 Duck River EMC.
 Lincoln County Power District or Lincoln County EMC.
 Gibson County EMC.
 Lauderdale County Power District.
 Alabama Power District.
 Lauderdale County Corporation.
 Clarke-Washington EMC.
 Bradley County EMC.
 West Tennessee EMC.
 Marshall County EMC.
 DeKalb County EMC.
 Franklin County EMC.
 West Monroe County Elec. Power Assn.
 Fayette County EMC.
 Marshall County EMC.
 Pontotoc County Elec. Power Assn.
 Meigs County EMC.
 North Georgia EMC.
 Tombigbee County Elec. Power Assn.
 Middle Tennessee EMC.
 Southwest Tennessee EMC.
 Pickwick EMC.
 Cullman County EMC.
 Colbert County Power District.
 Morgan and Lawrence Counties, Alabama.
 Colbert County Corporation.
 Bedford County EMC.
 Madison County EMC.
 East Tennessee EMC.

Cooperative Electric Power Associations—Continued

Guntersville EMC.

Madison County EMC.

Lee County EMC.

4 County Elec. Power Assn.

Stone's River EMC.

Franklin County EMC.

[fol. 372] EXHIBIT "B" TO MOTION TO PRODUCE DOCUMENTS,
ETC.

Affidavit

STATE OF TENNESSEE,

County of Knox, ss:

Charles M. Seymour, being first duly sworn, says that he is one of the solicitors for Complainants herein.

It is alleged in Complainants' Bill of Complaint, among other things, that the dams constructed or proposed to be constructed by Defendants herein are constructed for the direct and primary purpose of producing electric energy proposed to be deliberately produced at said dams for use in creating and operating a great federally-owned public utility and not as an incident to the exercise of any powers delegated to the United States by the Constitution; that none of said dams serve nor are they designed to serve any real or substantial purpose of navigation or otherwise that may lawfully or constitutionally be served by the government of the United States or any lawful agency thereof; that the Defendants, in the construction of said dams, designed the same and provided for the creation of huge reservoirs back of each of said dams for the primary purpose of assuring the production of tremendous quantities of electric energy by the generating units installed or proposed to be installed at each of said dams, and that the drawings, maps, charts, graphs, tabulations, surveys, reports and data prepared or recorded by Defendants, or their representatives, [fol. 373] and which are now in the possession of or under the control of said Defendants, in connection with the construction of said dams, more fully described in Exhibit A, attached to and made a part of the Motion of which this Affidavit is a part and to which it is attached, are necessary

to be produced in advance of trial for the inspection by Complainants to enable Complainants to prove said allegations; that none of said drawings, maps or documents are in the possession of any of the Complainants herein; and that said maps, drawings and documents, and each of them, are material and relevant and are admissible in evidence herein.

It is further alleged in said Bill of Complaint, among other things, that Defendant Tennessee Valley Authority was organized and all of said Defendants have been continuously engaged from and after its organization in carrying out a plan, the objects of which were, among other things: (a) to create and operate a great federally-owned public utility; (b) to control and regulate the rates of privately owned public utilities, including Complainants', by means of federally subsidized competition and to compel reductions of said rates without regard to the statutes, rules or regulations of the respective states in which said utilities are engaged in business and in invasion of the powers reserved to the states by the Constitution of the United States; and (c) to promote public ownership and operation of public utilities by means of propaganda and federally subsidized competition. The corporate records and documents of the Defendant Tennessee Valley Authority, described in the Exhibit A attached to the Motion of which this Affidavit is a part and more fully described therein contain [fol. 374] information (not in the possession of Complainants) which will tend to prove said allegations of complainants' Bill, and the production of said corporate records and the inspection thereof by Complainants in advance of the trial hereof is necessary to enable Complainants to prove the allegations of said Bill at the trial of this action; said records are material and relevant and admissible in evidence herein.

Further affiant saith not.

Charles M. Seymour.

Sworn to before me and subscribed in my presence this 20th day of September, 1937. Elsie Schettler, Notary Public. My Notarial Commission expires July 10, 1938. (Seal.)

[fol. 375] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION FOR LEAVE TO TAKE DEPOSITION OF HAROLD L. ICKES—
Filed September 20, 1937

Now come Complainants herein by their solicitors and move the Court for an order permitting complainants to take the testimony of Harold L. Ickes, residing in Washington, D. C., by deposition de bene esse or by oral examination before the Special Master heretofore appointed by the United States District Court for the Eastern District of Tennessee, Northern Division, by order dated July 2, 1937, a copy of which order is hereto attached and marked "Exhibit A", for the reasons that the testimony of said Harold L. Ickes is necessary to enable complainants to prove certain allegations of plaintiffs' Bill of Complaint herein and that said testimony could not be previously taken in this cause for reasons more fully set forth and appearing in the affidavit of Raymond T. Jackson, one of the solicitors of complainants, hereto attached, marked "Exhibit B" and made a part hereof.

Frantz, McConnell & Seymour, Trabue, Hume & Armistead, Baker, Hostetler, Sidlo & Patterson,
Solicitors for Complainants.

A copy of this motion and exhibits has been delivered to the Solicitor for defendants.

Frantz, McConnell & Seymour, by Charles D. Snapp.

[fol. 376] RECITAL AS TO EXHIBIT "A" TO MOTION

Exhibit "A" attached to the motion for leave to take the deposition of Harold L. Ickes is a copy of the order appointing Hal H. Clements, Jr., as Special Master and to avoid duplication is here omitted.

[fol. 377] EXHIBIT "B" TO MOTION FOR LEAVE TO TAKE
DEPOSITION OF HAROLD L. ICKES

IN UNITED STATES DISTRICT COURT

[Title omitted]

AFFIDAVIT OF RAYMOND T. JACKSON

STATE OF OHIO,

Cuyahoga County, ss.:

Raymond T. Jackson being first duly sworn on oath deposes and says:

That he is a member of the firm of Baker, Hostetler, Sidlo & Patterson, and one of the counsel for plaintiffs in the above-entitled suit;

That on July 27, 1937 affiant communicated by telephone with Mr. James Lawrence Fly, general counsel for the Tennessee Valley Authority, who was then in Washington, D. C., with reference to deferring the taking of the deposition of the Honorable Harold L. Ickes, Administrator of the Federal Emergency Administration of Public Works; that affiant informed Mr. Fly that if Mr. Fly insisted, affiant would take the deposition of Mr. Ickes during that week and before July 31, 1937, but that affiant requested that the taking of Mr. Ickes' deposition be deferred for the reasons: (1) that owing to the illness of Mr. Newton D. Baker, the senior member of affiant's firm, it had become necessary for affiant to participate in the argument of the case of Duke [fol. 378] Power Company v. Greenwood County, et al., in the United States Circuit Court of Appeals for the Fourth Circuit at Asheville, North Carolina, on August 3, 1937; that under the previous arrangements it had been planned that Mr. Baker would argue said case in the Fourth Circuit Court of Appeals and affiant had not expected to have any responsibility in that matter; that as a result of the changed circumstances caused by Mr. Baker's illness it was necessary for affiant to devote some time to the suit and the briefs in preparation for said argument, and further to meet Mr. S. W. O'B. Robinson, Jr., general counsel for the Duke Power Company, prior to the day set for argument in the case, to confer with Mr. Robinson with reference to the division and presentation of said arguments; that counsel

for plaintiffs was anxious, if possible, to avoid taking the deposition of Mr. Ickes, both as a matter of convenience to counsel for defendants and plaintiffs in this case and in deference to the fact that Mr. Ickes had recently been ill and it was uncertain whether he was yet fully recovered from his illness so that his health was such that he should be subjected to any burdens which could be avoided for the time being; that counsel for plaintiffs conceived that it might be possible to avoid taking Mr. Ickes' deposition if sufficient information were obtained through the depositions of other officers and agents of the Federal Emergency Administration of Public Works, and that if not, it might be possible to supplement the depositions of other officers and agents of the Federal Emergency Administration of Public Works by a stipulation with reference to Mr. Ickes' testimony and avoid the necessity of taking his deposition; that these facts were stated to Mr. Fly as reasons for the request to defer the taking of Mr. Ickes' deposition; that Mr. Fly [fol. 379] under these circumstances agreed that the taking of the deposition of Mr. Ickes might be deferred and after Mr. Fly had expressed the wish that the deposition be taken, if that proved necessary, by August 15th, it was agreed in the conversation between affiant and Mr. Fly that shortly after affiant returned from argument of the case of Duke Power Company v. Greenwood County at Asheville, North Carolina, affiant would communicate with Mr. Fly with reference to the taking of Mr. Ickes' deposition, and it was expressly stated by affiant that if it proved impossible to avoid taking Mr. Ickes' deposition counsel for plaintiffs desired to arrange the deposition at a time which would meet the convenience both of counsel for the defendants in this cause and the convenience of Mr. Ickes, who had been ill and who on his return would obviously be pressed with accumulated matters requiring his attention and decision;

That affiant after his return from the argument of the case of Duke Power Company v. Greenwood County at Asheville, North Carolina, on the morning of August 7, 1937 attempted to telephone to Mr. Fly at Knoxville with reference to the taking of Mr. Ickes' deposition or the making of a stipulation in lieu thereof; that affiant was informed that Mr. Fly had left for Washington; that on Monday, August 9, 1937, Charles M. Seymour, Esq., Knoxville, Tennessee, one of the counsel for the plaintiffs in this cause, by telephone informed affiant that he was attempting to

communicate with Mr. Fly with reference to a different stipulation which had been under discussion between counsel for plaintiffs and defendants in this cause and that when and if Mr. Seymour, who had the advantage of local communication with Mr. Fly's staff in Knoxville, should succeed in getting into communication with Mr. Fly, Mr. Seymour would advise affiant so that affiant might communicate with Mr. Fly with reference to the taking of the deposition [fol. 380] of Mr. Ickes; that later on August 9, 1937 Mr. Seymour informed affiant that he was unable to reach Mr. Fly anywhere by telephone in Washington but that Mr. Seymour was continuing his efforts to get in communication with Mr. Fly and would inform affiant as soon as he was able to do so;

That when Mr. Seymour informed affiant on Tuesday, August 10, 1937, that he had been unable to establish direct communication with Mr. Fly in Washington but had heard indirectly from him through other counsel for the Tennessee Valley Authority, affiant then attempted to communicate by telephone with Mr. Fly in Washington; that affiant was unable to reach Mr. Fly by telephone in Washington; that on the afternoon of August 10, 1937 affiant then sent to Mr. Fly at Washington a telegram reading as follows:

"Telegram

August 10, 1937.

James Lawrence Fly, Esq., Hayes Adams Club, Washington, D. C.:

Have been trying to reach you by telephone since Saturday morning stop Realize you are very busy but desire to discuss with you at your earliest convenience whether taking of deposition deferred by agreement between us may be avoided and if not when most convenient to you for us to take deposition.

R. T. Jackson";

that on August 11, 1937 Mr. Fly accepted affiant's telephone call in Washington and informed affiant that he had failed to accept affiant's call before because he had assumed that the call was with reference to the same stipulation in regard to which Mr. Seymour had been attempting to talk with him by telephone; and that since Mr. Fly had arranged for Mr. William C. Fitts, Jr., one of the counsel for the Tennessee Valley Authority, to handle said stipulation with

Mr. Seymour, Mr. Fly had thought it unnecessary to accept [fol. 381] affiant's call; that in the telephone conversation of August 11, 1937 with Mr. Fly, affiant informed Mr. Fly that counsel for plaintiffs were not certain whether they would be able to propose a stipulation in lieu of the taking of Mr. Ickes' deposition; that a definite conclusion on that point would be facilitated by an opportunity to examine the exhibits which had been obtained through the depositions of other officers and agents of the Public Works Administration which had not yet been transcribed and supplied by the reporter to counsel for plaintiffs; that plaintiffs desired to do whatever would meet the convenience of counsel for the defendants in the matter of taking Mr. Ickes' deposition; that if it were agreeable to Mr. Fly to wait until copies of the exhibits obtained from the other agents or officers of PWA should be received from the reporter, counsel for plaintiffs would examine them as speedily as possible and attempt to propose a stipulation in lieu of taking the deposition; that Mr. Fly stated that that would be satisfactory, but suggested that we should urge the reporter to expedite the furnishing of copies;

That thereupon affiant immediately communicated with Mr. Charles M. Seymour and requested him to ask the reporter to expedite as much as possible the transcription of said exhibits and testimony and the forwarding of a copy to affiant at Cleveland, Ohio; that such testimony and some, but not all of the exhibits, that had been produced by other witnesses connected with the Public Works Administration were received at Cleveland, Ohio, on Tuesday, August 17th, 1937; that counsel for plaintiffs immediately examined the same and attempted to draft a stipulation in lieu of taking Mr. Ickes' deposition;

That on August 19, 1937 affiant attempted to telephone [fol. 382] to Mr. Fly with reference to the making of a stipulation in lieu of taking Mr. Ickes' deposition, or the setting of a day for taking the same, and was informed that Mr. Fly was in Asheville, North Carolina, and that Mr. Fly could not be reached by telephone, but that Mr. Fly was expected back in Knoxville that afternoon; that affiant left a request that Mr. Fly should call immediately on his return; that thereafter, and in order to facilitate an early disposition of the matter, affiant then telephoned Mr. William C. Fitts, Jr., one of the counsel for the Tennessee Valley Authority, and informed Mr. Fitts of his efforts to reach

Mr. Fly, requested Mr. Fitts to urge Mr. Fly to telephone affiant as soon as he returned that day, and said to Mr. Fitts that a suggested stipulation in lieu of taking Mr. Ickes' deposition and of a character similar to that made by the parties in *Ashwander v. Tennessee Valley Authority* was being drafted and sent out to co-counsel for their approval; that it was proposed to submit such stipulation as soon as approval could be obtained by co-counsel and certain other interested parties; that it occurred to affiant that perhaps it would be desirable and that perhaps Mr. Fly would prefer to set some definite date for taking Mr. Ickes' deposition convenient to counsel for the defendants and Mr. Ickes, with the understanding that counsel would attempt in the meantime to reach a stipulation in lieu of taking the deposition, but that if negotiations for such stipulation failed then the deposition would be taken upon the day previously fixed;

That Mr. Fly did not return affiant's call on August 19, 1937, and that on August 20, 1937 affiant again called Mr. Fly by telephone and repeated the substance of the statement theretofore made to Mr. Fitts; that Mr. Fly then said that he was insistent that the stipulation be concluded immediately or the deposition taken; that affiant pointed out that it would be impossible to take the deposition during that week, since the next day was Saturday, and also that if there were going to be a bona fide effort to secure a stipulation in lieu of taking the deposition of Mr. Ickes it would be necessary to have a little time in which to iron out any differences of view between the parties; that thereupon it was agreed that attempts should be made to set the taking of Mr. Ickes' deposition for Wednesday, August 25, providing it were possible to secure Mr. Ickes for that purpose at that time; and that in the meantime counsel for plaintiffs would submit a proposed stipulation in lieu of taking said deposition;

That counsel for plaintiffs immediately prepared a subpoena duces tecum to serve upon Mr. Ickes and went to Washington on Sunday, August 22, 1937 to arrange for its issuance and service; that said subpoena duces tecum was issued Monday morning, August 23, and was served immediately on Mr. G. G. Madigan, who had been previously designated by Mr. Ickes to accept service of subpoenas on matters relating to Public Works Administration; that counsel for plaintiffs were informed that Mr. Ickes (as all parties had previously known) had been ill; that he had only re-

sumed such attention as he could give to his numerous duties a short time before the adjournment of Congress in order to dispose of necessary matters and give certain information with reference to pending legislation which had to be taken care of prior to the adjournment of Congress; that Mr. Ickes had immediately left Washington for a short rest and that he would not be available until his return for the taking of his deposition; that plaintiffs were informed by counsel for the Public Works Administration and believed that Mr. Ickes would return not later than within two or three weeks and possibly sooner, and that at any time there- [fol. 384] after Mr. Ickes would be available to give his deposition subject to reasonable consideration for his convenience and the duties of his office; that counsel for plaintiffs desired to take his deposition at such time as would meet the reasonable convenience of Secretary Ickes and the reasonable convenience of counsel for the defendants;

That on Monday, August 23, 1937, counsel for plaintiffs left a copy of the subpoena duces tecum for Mr. Ickes with Mr. Robert E. Sher, counsel for the Power Division of the Public Works Administration and that Mr. Sher stated that he would collect the documents described and would advise with counsel for the defendants, and unless counsel for defendants objected would deliver copies of such documents, with certain possible minor exceptions which are not material here, to counsel for plaintiffs in the hope that it would expedite the making of a stipulation in lieu of taking Mr. Ickes deposition; that Mr. Sher later in the day on August 23, 1937 advised counsel for plaintiffs that he had communicated with counsel for the defendants and that they had objected to any such documents being delivered to counsel for plaintiffs in advance of the making of the stipulation or an examination of Mr. Ickes;

That counsel for plaintiffs, on August 23, 1937, submitted to counsel for the defendants a proposed stipulation of Secretary Ickes; that counsel for the defendants refused to make any stipulation of any kind whatsoever with reference to Mr. Ickes' testimony, even refusing to stipulate any of the facts previously stipulated by the same counsel with reference to what Mr. Ickes would testify if called as a witness in the case of Ashwander v. Tennessee Valley Authority;

That affiant then communicated with Mr. Robert E. Sher, counsel for the Power Division of the Public Works Ad-

[fol. 385] ministration, with reference to Mr. Ickes' whereabouts and whether his deposition might be taken elsewhere than in Washington; that Mr. Sher advised affiant that he would not be able to ascertain Mr. Ickes' whereabouts or the precise date of his return to Washington before Wednesday, August 25, 1937; that he would dislike to see Mr. Ickes disturbed while he was seeking a short rest; and that Mr. Sher would if possible inform the affiant on Wednesday, August 25, 1937, when Mr. Ickes would return to Washington, whether it would be possible to take Mr. Ickes' deposition in the interim and if possible when Mr. Ickes' deposition could be taken, if no stipulation could be made between counsel in this case in lieu of taking such deposition.

That on Wednesday, August 25, 1937, Mr. Sher informed affiant by telephone that Mr. Sher was not free to disclose Mr. Ickes' whereabouts as he had left positive orders that he should not be disturbed during the period of his rest and that therefore it would not be possible to arrange any agreement for the taking of Mr. Ickes' deposition prior to Mr. Ickes' return to Washington at the conclusion of his rest. Affiant later learned from newspaper news stories that Mr. Ickes did not return to Washington until about September 11, 1937.

Affiant understood and now understands from the foregoing information and from information made available to the public generally through the public press, and upon the basis of such information therefore states, that it would have been impossible for Mr. Ickes to agree to give his deposition before his departure for the aforesaid rest, as Mr. Ickes, during the short period intervening between his resumption of duties following his illness and his departure [fol. 386] for such rest, had been continuously occupied so far as his health permitted with official business and particularly with the pressure of matters incident to the adjournment of Congress; that Mr. Ickes would have been compelled to decline to give his deposition until a later date unless compelled by court order to do so sooner and that to have compelled Mr. Ickes to give his deposition sooner would have been to disregard the reasonable convenience of Secretary Ickes under the circumstances.

The motion to which this affidavit is attached for an order permitting plaintiffs to take the deposition of Mr. Ickes was not filed immediately following the refusal of counsel for defendants on August 23, 1937, to stipulate in lieu of

taking such deposition because the Congress, a short time prior to its adjournment on August 21, 1937, had passed a bill which necessitated the hearing on this case by a court composed of three United States judges, which bill was signed by the President of the United States a few days thereafter; the judges comprising said court were not designated until Friday, September 17, 1937, and affiant was first informed thereon on the morning of Saturday, September 18, 1937.

Further affiant sayeth not.

Raymond T. Jackson.

Sworn to before me and subscribed in my presence this 18th day of September, 1937. Joan Atkinson, Notary Public. My commission expires July 10, 1940.

[fol. 387] IN UNITED STATES DISTRICT COURT

(Caption omitted)

APPLICATION OF COMPLAINANTS FOR AN ORDER REQUIRING DEFENDANTS TO PRODUCE DOCUMENTS OR IN THE ALTERNATIVE FOR EXTENSION OF TIME FOR TAKING TESTIMONY BEFORE SPECIAL MASTER—Filed September 20, 1937

Now come complainants by their solicitors and represent to the court as follows:

1. Subsequent to the former order of this court dated the 2nd day of July, 1937, appointing the Honorable Hal H. Clements, Jr., Special Master with authority to take evidence offered by the parties hereto and report the same to the court, complainants did, pursuant to order of said Special Master, commence to take evidence before said Special Master on the 20th day of July, 1937, which date was the earliest practicable date that said Special Master could hold hearings; and thereafter complainants proceeded diligently with the taking of evidence before said Special Master in the states of Georgia, Tennessee, Alabama and the District of Columbia. The taking of testimony in the states of Georgia, Tennessee and Alabama was completed on Monday, the 26th day of July, 1937, and the taking of testimony was commenced in the District of Columbia on Wednesday, the 28th day of July, 1937, at ten o'clock A. M.

[fol. 388] 2. Complainants caused subpoenas duces tecum to be issued by the District Court of the United States for the District of Columbia for several witnesses residing therein one of whom was John M. Carmody, the Administrator of Rural Electrification Administration. Due to the absence of said witness from Washington, D. C. the subpoena duces tecum was not served on him until Friday, July 30, 1937, which by its terms directed said witnesses to appear on Saturday, July 31, 1937, at eleven o'clock A. M. before said Special Master.

3. The subpoena duces tecum served on said John M. Carmody required him to produce, among other things, any and all correspondence between Tennessee Valley Authority, its officers, directors or employees, or Arthur E. Morgan, Harcourt A. Morgan or David E. Lilienthal, or any of them and Rural Electrification Administration and any of its officers, directors or employees relating to, discussing or having to do with the making, or any of the terms of any contracts or agreements between Rural Electrification Administration and cooperatives organized and existing in the area in which the Tennessee Valley Authority is operating, including each of the following named cooperatives, to wit:

Clarke-Washington Electric Membership Corporation.
 Cullman County Electric Membership Corporation.
 Franklin County Electric Membership Corporation.
 Marshall County Electric Membership Corporation.
 North Georgia Electric Membership Corporation.
 Pontotoc County Electric Power Association.
 Monroe County Electric Power Association.
 4-County Electric Power Association.
 Meigs County Electric Membership Corporation.
 Duck River Electric Membership Corporation (old Bedford County Electric Membership Corporation).
 Middle Tennessee Electric Membership Corporation (old Stone's River Electric Membership Corporation).
 Southwest Tennessee Electric Membership Corporation.
 Lauderdale County Corporation.
 Alabama Power District.
 Lee County Electric Membership Corporation.

[fol. 389] DeKalb County Electric Membership Corporation.

Guntersville Electric Membership Corporation.

Madison County Electric Membership Corporation.

Alcorn County Electric Power Association.

Prentiss County Electric Power Association.

Tombigbee Electric Power Association.

West Monroe County Electric Power Association.

Lincoln County Electric Membership Corporation.

Fayette County Electric Membership Corporation.

Tishomingo County Electric Power Association.

Pickwick Electric Membership Corporation.

Gibson County Electric Membership Corporation.

East Tennessee Electric Membership Corporation.

West Tennessee Electric Membership Corporation.

Tri-County Electric Membership Corporation.

Colbert County Power District.

Lauderdale County Corporation.

Colbert County Corporation.

Cherokee County Electric Membership Corporation.

Joe Wheeler Electric Membership Corporation.

4. Said John M. Carmody, while being examined as a witness, stated that he was sure that there was in his possession correspondence of the kind and character called for by said subpoena duces tecum but said witness refused to produce the same, refused to comply with the request of the solicitors for complainants that said correspondence be produced and refused to obey the order and direction of said Special Master so to do.

5. By reason of the refusal of said witness John M. Carmody to produce the correspondence so subpoenaed and requested as hereinbefore set forth and by reason of the limitations of time allowed complainants for the taking of testimony before said Special Master complainants were unable to complete the taking of evidence before the Special Master within the time heretofore fixed by this court for the taking thereof. In order for complainants to complete the taking of the testimony of said Carmody before said Special Master a proceeding would need be inaugurated in the United States District Court for the District of [fol. 390] Columbia to obtain an order of said court direct-

ing said John M. Carmody to obey the subpoena duces tecum served on him, and produce the correspondence described in said subpoena and submit to examination before said Special Master. Defendants, by their solicitors, have objected before said Special Master to the holding of any further hearings by said Special Master, to the taking of any additional testimony before him and to the making of any order by said Special Master continuing the examination of the witness Carmody until such time as an order from the United States District Court for the District of Columbia directing said witness to produce said correspondence could be obtained.

6. Complainants believe and hence aver that counterparts of all of said correspondence are now in the possession of or under the control of the defendants herein. Said correspondence is material and relevant to the determination of the issues involved in this case, and the production thereof by defendants herein is necessary to enable complainants to fully prove the allegations of their Bill of Complaint herein.

7. Complainants do not desire to prolong said hearings before said Special Master or incur the expense or possible delays that would be involved in inaugurating and carrying on any process by way of contempt proceedings or otherwise against said John M. Carmody in the United States District Court for the District of Columbia but complainants do desire, and assert that they are now entitled to have produced by the defendants counterparts of the correspondence sought to be produced from said Carmody as Administrator of Rural Electrification Administration, to wit, any and all correspondence between Tennessee [fol. 391] Valley Authority, its officers, directors or employees or Arthur E. Morgan, Harcourt A. Morgan or David E. Lilienthal or any of them and Rural Electrification Administration and any of its officers, directors or employees relating to, discussing or having to do with the making of or the terms of any and all contracts or agreements between Rural Electrification Administration and cooperatives organized and existing in the area in which Tennessee Valley Authority is operating, specifically including each of the cooperatives hereinbefore named in Paragraph 3 hereof; that said correspondence should now be produced by defendants herein or, in the alternative,

that the time within which complainants may take testimony before said Special Master should be extended for such period of time as may be necessary to enable appropriate proceedings in the United States District Court for the District of Columbia against the said John M. Carmody to be inaugurated and consummated and the taking of said witness's testimony to be thereafter completed.

8. In addition to the foregoing the complainants represent that the following unpublished records and data in the custody and possession of the Mississippi River Commission at Vicksburg, Mississippi, are necessary in the trial of this cause and material to a determination of the issues herein:

Daily hydrographs for the Mississippi River at Belmont, Mo., for the years 1895 to 1902, inclusive;

Daily hydrographs for the Mississippi River at Columbus, Ky., for the years 1903 to 1927, inclusive;

Daily hydrographs for the Mississippi River at Hickman, Ky., for the years 1928 to 1932, inclusive;

Stream flow records for the Mississippi River in the vicinity of Cairo, Illinois, for whatever period these data may be available;

[fol. 392] that unless the authentication of the aforesaid data is waived by the defendants it will be necessary to obtain the production and authentication thereof by further depositions before the Special Master in Vicksburg, Mississippi; and that, in the event of the refusal of the defendants to stipulate or in the event of the refusal of said Mississippi River Commission to produce on request the records and data referred to, the complainants desire to take the testimony of such officer or officers of the Mississippi River Commission as may have custody of the records in question and to take such further steps and measures as may be necessary and appropriate to require the production and authentication of such evidence.

Wherefore, complainants pray this court for an order directing defendants herein to produce the correspondence in defendants' possession or under its control hereinbefore described in paragraphs 3 and 7 of this application in order that complainants may inspect and make copies of the same forthwith or at such time in advance of the trial of this

cause as to this court may seem just and proper or, in the alternative, for an order extending the time within which complainants may take evidence before said Special Master until proceedings in the United States District Court for the District of Columbia to require said witness to produce said correspondence have been consummated and the taking of the testimony of said witness can be completed and authorizing and directing the Special Master to order a further hearing or hearings in the District of Columbia to accomplish such purpose and directing said Special Master to make such other and further orders as may be necessary to complete the examination of said John M. Carmody in order that the testimony of said witness may be taken and [fol. 393] reported to this court in accordance with the former order of this court dated July 2, 1937.

Complainants further pray the court for a finding that the documents and records hereinbefore described in Paragraph 8 of this application are necessary in the trial of this cause and material to the determination of the issues herein; and for an order extending the time within which complainants may offer evidence before said Special Master respecting the aforesaid records and data of the Mississippi River Commission at Vicksburg, Mississippi, and authorizing and directing said Special Master to make such orders or inaugurate or carry out such proceedings including any orders fixing a date or dates for hearings as may be necessary or proper or as the parties and their counsel may agree upon to effectuate the production and authentication of said records and documents.

(S.) Baker, Hostetler, Sidlo & Patterson, Union Trust Building, Cleveland, Ohio; Trabue, Hume & Armistead, American Trust Building, Nashville, Tennessee; Frantz, McConnell & Seymour, 700 Burwell Building, Knoxville, Tennessee, Solicitors for Complainants.

A copy of this motion has been delivered to the Solicitor for defendants.

Frantz, McConnell & Seymour, by Charles D. Snapp.

[fol. 394] *Duly sworn to by Wm. H. Bemis. Jurat omitted in printing.*

[fol. 395] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER DESIGNATING JUDGES TO TRY CASE—Filed September
21, 1937

It having been made to appear to me, as Senior Circuit Judge of the Sixth Judicial District of the United States, that there is pending before the Honorable John J. Gore, in the United States District Court for the Eastern District of Tennessee in this circuit, an action entitled *The Tennessee Electric Power Company, et al. vs. Tennessee Valley Authority et al*, Cause No. 228 in equity, wherein a permanent injunction is sought involving the constitutionality of an Act of Congress affecting the public interest;

Now, therefore, I, as such Senior Circuit Judge of the Sixth Judicial Circuit, do hereby designate the Honorable John D. Martin, United States District Judge for Western District of Tennessee, to participate with the Honorable Florence E. Allen, United States Circuit Judge for the Sixth District, also this day designated, and the Honorable John J. Gore, in the hearing and determining of the application for the injunction therein sought.

(S.) Charles H. Moorman, Senior Circuit Judge,
Sixth Judicial Circuit.

Dated, Louisville, Ky., September 17, 1937.

[fol. 396] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER DESIGNATING JUDGES TO TRY CASE—Filed September
21, 1937

It having been made to appear to me, as Senior Circuit Judge of the Sixth Judicial District of the United States, that there is pending before the Honorable John J. Gore, in the United States District Court for the Eastern District of Tennessee in this circuit, an action entitled *The Tennessee Electric Power Company, et al. vs. Tennessee Valley Authority et al*, Cause No. 228 in equity, wherein a perma-

nent injunction is sought involving the constitutionality of an Act of Congress affecting the public interest;

Now, therefore, I, as such Senior Circuit Judge of the Sixth Judicial District, do hereby designate the Honorable Florence E. Allen, a Circuit Judge of said Circuit, to participate with the Honorable John J. Gore and the Honorable John D. Martin, United States District Judge for the Western District of Tennessee, also this day designated, in the hearing and determining of the application for the injunction therein sought.

(S.) Charles H. Moorman, Senior Circuit Judge,
Sixth Judicial Circuit.

Dated, Louisville, Ky., September 17, 1937.

[fol. 397] IN UNITED STATES DISTRICT COURT

(Caption omitted)

AFFIDAVIT OF JAMES LAWRENCE FLY—Filed September 27,
1937

James Lawrence Fly, first being duly sworn, on oath deposes and says:

That he is General Counsel for the Tennessee Valley Authority and is one of the solicitors of record for the defendants in the above-entitled cause. Affiant and the other counsel for the defendants in this cause are now devoting their entire time to the preparation of the evidence to be presented to this Court upon final hearing, now set for October 18, 1937. Thorough and detailed preparation of the proof to be offered is necessary not only for the protection of the interests of the defendants but also in order that this proof may be so organized that it can be presented to the Court in a simple and easily understandable form.

As will appear from this affidavit, much of the time of the affiant and of his co-counsel up to August 1, 1937, was monopolized by the proceedings instituted by the complainants for the taking of depositions. These were taken in three Southern States and in the District of Columbia. The claim of need for this deposition is quite without merit. Unnecessarily to resume the taking of these depositions at this time, only three weeks prior to the date of final hearing and long

after the time allotted for such proceedings, would result in serious prejudice to the defense of this cause. If the complainants after long delay, are now permitted to take the deposition of Administrator Ickes as prayed in their motion, it will be necessary for affiant and his co-counsel to abandon the preparation of the defense for a period of at least three days, which will be necessarily consumed by the taking of this deposition at Washington. This burden, under the facts, [fol. 398] affiant feels should not be placed upon the defense.

As appears from the records in this case, the answer of the defendants was filed on November 24, 1936, and this cause has been at issue since that time. Accordingly, under equity rule 47, the time for the taking of depositions by the complainants would have expired sixty (60) days from that date, or on January 23, 1937, unless said time were extended by stipulation of the parties or order of the Court for good cause shown. In order to prevent the expiration of the time under the rule the parties agreed to an order extending the complainants' time for taking depositions until sixty (60) days from March 1, 1937. This order was entered by the Court on January 19, 1937. Subsequently a second order extending the time for the taking of depositions until sixty (60) days from May 1, 1937, was entered by the Court by agreement of the parties on March 19, 1937. Messrs. William H. Bemis and Charles M. Seymour of counsel for the complainants conferred with affiant concerning matters connected with the case and with particular reference to the time to be allowed the complainants for the taking of depositions. At that time affiant pointed out that the time allowed by the last order of extension would expire on July 1, 1937. Affiant also made it clear to opposing counsel at that time that it was of great importance to the defendants that the taking of depositions by the complainants should be completed at a time sufficiently in advance of the date of the final hearing, which at that time had been set for October 12, 1937, to enable counsel for the defendants to properly prepare the defense of this case. Affiant also stressed the fact that in his opinion there was no justification or excuse for taking any extensive depositions in view of the express provisions of equity rule 46 adopting the practice of trying suits in equity by the testimony of witnesses in open court so far as possible. After much discussion as to the necessity for an extension of time, affiant finally reached a tentative agree-

ment to the effect that the complainants' time for taking depositions would be extended to July 25, 1937. Subsequently at the time of a preliminary hearing upon other matters the Court, with the consent of the affiant, entered an order extending the time during which complainants' [fol. 399] depositions might be taken to August 1, 1937. This order was entered on July 3, 1937, the same date upon which the order appointing the special master for the taking of depositions was entered.

The decree of the District Court dissolving the preliminary injunction that had been previously issued in this cause had been entered on June 15, 1937. Complainants under existing and subsequent orders of the Court as above recited had from that date to August 1 in which to complete the taking of depositions. Nevertheless no move was made to proceed with such depositions until July 20, upon which date complainants began the taking of various depositions in Tennessee, Alabama, and Georgia. To the best of affiant's recollection, nothing was said during the period of time from June 15 to July 27 concerning the desirability or necessity of taking the deposition of the Honorable Harold L. Ickes. On July 27 affiant, together with counsel representing the complainants, was in Washington, D. C., prepared to be present at the taking of various depositions by the complainants. On July 28 the complainants took the depositions of Mr. Michael Strauss, Publicity Director of the Public Works Administration, and Colonel Horatio Hackett, the Assistant Administrator. Blanket subpoenas duces tecum calling for a myriad of documents with but a remote bearing upon the issues in this suit were issued and served upon these gentlemen. Both of these witnesses responded to the subpoenas, made no objection to the scope thereof, and produced the documents called for without limitation. These documents from the files of the Public Works Administration were freely and extensively produced and were marked in evidence before the special master. To the best of affiant's knowledge, Administrator Ickes was at his office in Washington at the time these depositions were taken. So far as affiant knows, no effort was made to issue and serve a subpoena upon him at that time.

It is true that about this same time, either on July 27 or July 28, Mr. Raymond Jackson of counsel for the complainants telephoned affiant from Cleveland, stating that he had

important court engagements and desired a few days in which to consider the necessity of taking the deposition of [fol. 400] Administrator Ickes. Mr. Jackson at that time led affiant to understand that in all probability there would be no necessity for taking the deposition but that he desired to look over the other depositions before coming to a final decision. He expressed the further thought that in all probability if any more material proved necessary it would probably consist of two or three documents concerning which a stipulation would be possible. Affiant at that time reiterated his strenuous objections to the consumption of so much time and effort with the date for final hearing rapidly approaching but stated that he would consent to extending the time for the consideration of this one deposition for a period of ten (10) days. Thereafter Mr. Jackson telephoned affiant on two occasions and stated that he had not yet been able to go over the other depositions and that he would need additional time. Under protest, affiant, by repeated concessions, finally agreed to extend the time for this one deposition up to Wednesday, August 25, twenty-five (25) days after the time allowed by the last court order had expired. Affiant at this time clearly stated that no further extensions would be granted by request under any circumstances. Finally, on Monday, August 23, counsel for complainants presented to affiant a proposed stipulation concerning the testimony of Administrator Ickes.

Far from merely covering the authentication of a limited number of documents, as had been the original understanding, the proposed stipulation called for numerous admissions, statements of opinion, summaries and conclusory interpretations of documents already offered in evidence, etc. In order that the Court may have before it the exact information as to the nature of the stipulation that was presented, a true copy of the same is attached to this affidavit and made a part hereof. Affiant submits that the nature of this proposed stipulation demonstrates that complainants have no substantial or proper need for this deposition.

Affiant further states that counsel representing complainants have available to them the complete record of the proceedings in the United States District Court for the North-[fol. 401] ern District of Alabama in the case of Ashwander, et al. v. Tennessee Valley Authority, et al., including the PWA documents and correspondence included therein; that

several of these same complainants have been involved in previous litigation with the PWA in which these documents and correspondence have been in their possession; and that counsel for the complainants have been counsel in several other cases directly involving the PWA and in such cases have had full opportunity to examine the Administrator with reference to the documents in his possession. The Administrator has been examined in at least two of these cases, and the various documents may be found in several different records in the possession of these complainants and of their counsel. Throughout the taking of the depositions in Washington complainants were represented by at least four members of their own legal staff with full opportunity to examine the representatives of the PWA and with free access to the various documents and records of that agency.

Affiant from the date of the conference with complainants' counsel on June 11, 1937, to the present time, has consistently and continuously insisted that while he and his co-counsel were perfectly willing to allow complainants a reasonable and generous time in which to complete the taking of depositions, despite the fact that under the equity rules they were never entitled to any such extension as of right, he would insist that this phase of the litigation should be brought to an end sufficiently in advance of the date set for final hearing to permit adequate preparation of the defense without the need for any delay of the trial. Affiant states that the tactics of complainants in postponing the taking of depositions to the last possible moment and then seeking further extensions of time have seriously handicapped affiant and his co-counsel in the preparation of this cause for final hearing. Affiant further states that any further extension of time with the date of final hearing now set for October 18, less than a month away, would seriously prejudice the rights of the defendants.

James Lawrence Fly.

Sworn to before me and subscribed in my presence
this — day of September, 1937. — — —, Notary
Public. My Commission expires — — —, — — —.

[fol. 402] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER PERMITTING AMENDMENT TO MOTION TO COMPEL DEFENDANTS TO PRODUCE CERTAIN DOCUMENTS AND PERMIT INSPECTION THEREOF—Filed September 29, 1937

By leave of Court granted on the 27th day of September, 1937, complainants are permitted to amend the said motion heretofore filed on September 20, 1937, so as to add to Exhibit "A" thereto as item 12 of the list of "Records of the Tennessee Valley Authority comprising Engineering data, maps, drawings, charts, drafts, tabulations, etc.," the following:

(12) Original set of prints, in post binder, topographic sheets comprising "topographic map of Tennessee River Valley" made from plane table survey and aerial photographs under the direction of the local district engineer, Chattanooga, Tennessee, District, U. S. Engineer Department at Large, 1922-1927, on which is indicated by colors, symbols or conventional signs the various classes of lands and buildings with valuations thereof as appraised in the field by personnel of the Chattanooga District for consideration and study of the detailed cost of recommending navigation-power projects covered in final report on survey of Tennessee River and tributaries, North Carolina, Tennessee, Alabama and Kentucky, covering navigation, flood control, power development and irrigation printed in House Document No. 328, 71st Congress, 2d Session; and accompanying 21 notebooks in three-fourths leather showing recapitulation of estimated damage by flowage to lands and structures as shown on above mentioned topographic sheet on the recommended navigation-power projects Tennessee River.

Florence E. Allen, United States Circuit Judge. John J. Gore, United States District Judge. John D. Martin, United States District Judge.

Approved for Entry: Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles D. Snepp. William C. Fitts, Jr., Solicitor for Defendants.

[fol. 403] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER PERMITTING AMENDMENT TO MOTION TO TAKE DEPOSITION OF HAROLD L. ICKES—Filed September 29, 1937

By leave of Court, granted this 27th day of September, 1937, complainants are permitted to amend their motion to take the deposition of Harold L. Ickes by filing as Exhibit "C" to said motion a copy of the proposed stipulation on the testimony of Harold L. Ickes which was delivered to defendants on August 23, 1937.

Florence E. Allen, United States Circuit Judge.

John J. Gore, United States District Judge. John

D. Martin, United States District Judge.

Approved for Entry: Baker, Hostetler, Sidlo & Patterson, Frantz, McConnell & Seymour, Trabue, Hume & Armistead, by Charles D. Snepp, Sol. for Complainants. William C. Fitts, Jr., Sol. for Defendants.

[fol. 404] EXHIBIT "C" TO MOTION FOR LEAVE TO TAKE THE DEPOSITION OF HAROLD L. ICKES

IN UNITED STATES DISTRICT COURT

(Title omitted)

STIPULATION

The parties to the above-styled cause, acting by and through their respective solicitors of record, do hereby stipulate and agree that if Harold L. Ickes were called as a witness in this cause he would testify as follows:

That he is now, and at all times since July 12, 1933, has been, the duly appointed, qualified and acting Administrator of the Federal Emergency Administration of Public Works.

That he is now, and at all times has been, the Chairman of the National Power Policy Committee since that Committee was created in the Public Works Administration by order of the President on July 9, 1934.

That prior to November 1, 1933 David E. Lilienthal conferred with the Administrator with reference to the making

of loans and grants of federal funds through the Public Works Administration to municipalities or other public bodies for the construction of electric distribution systems to use TVA power, and that the Administrator expressed his willingness to cooperate with the Tennessee Valley Authority where loans and gifts of federal funds through the Public Works Administration would aid or assist the Tennessee Valley Authority in carrying out its power policy by considering in a cooperative manner applications for loans and gifts of federal funds to be made through the Public Works Administration for the construction of local electric distribution systems in the Tennessee Valley area where the municipalities had, or would, enter into contracts with the Tennessee Valley Authority for the use and distribution of electricity produced by the Tennessee Valley Authority.

[fol. 405] That sometime prior to November 2, 1933 David E. Lilienthal brought to the attention of the Administrator orally (by letter) a letter written by Harry Berry, Engineer of the Tennessee Public Works Board, to Mr. Lilienthal under date of October 16, 1933, in which Mr. Berry stated that in accordance with a statement of a Mr. Robert, Assistant Secretary of the Treasury, no federal funds would be used for the construction of a duplicate power plant in the municipality (and that a true copy of said letter written by Mr. Lilienthal to the Administrator is attached hereto as Exhibit A); that under date of November —, 1933 the Administrator wrote a letter to Harry Berry, Engineer of the Tennessee Public Works Board, with reference to said matter, a true copy of which letter is attached hereto as Exhibit B; that the Administrator, under date of November —, 1933, wrote a letter to David E. Lilienthal with reference to the aforesaid letter of Harry Berry, of which a true copy is attached hereto as Exhibit C.

That on or about November 18, 1933 the city of Knoxville filed an application with the Public Works Administration for a loan and grant in the total amount of \$3,225,000 (the loan to be secured by general obligation bonds of the city of Knoxville) for the construction of an electric distribution system in the city of Knoxville to use TVA power; said application being Exhibit 87 to the testimony of Horatio B. Hackett taken in this cause.

That on November 29, 1933 the Administrator stated in a press conference that Knoxville would have a good chance

of getting a municipal power loan and that "PWA would discuss the Knoxville situation with TVA officials because the latter was so deeply concerned with the problem"; that the nature of the concern theretofore expressed by officials of the Tennessee Valley Authority to the Administrator was that the Tennessee Valley Authority should secure a market for electricity in Knoxville and the surrounding area, and that the statement made by the Administrator at said press conference correctly stated the facts as they were known to him and as they had been made known to him by David E. Lilienthal and other representatives of the Tennessee Valley Authority.

That on or about December 8, 1933 the Administrator sent a telegram to the Tennessee Public Works Board, of which a true copy is attached hereto as Exhibit D; that said telegram was sent by the Administrator after David E. Lilienthal had called upon the Administrator and urged speed upon the application of the city of Knoxville, upon the ground, among others, that Knoxville was the "largest city which had decided to join the government's 'yardstick' power program in the Valley" and that the Administrator thereupon took action to speed up the handling of the application of the city of Knoxville at the request of, and for the reasons urged by, Mr. Lilienthal.

That prior to November 18, 1933 the city of Knoxville had filed applications with the Public Works Administration for the loan and grant of federal funds for the repair and construction of public schools and for the repair and replacement of public bridges; that said applications had been approved by the State Board of Public Works; that thereafter said applications were disapproved by the Administrator for the reason that the financial situation of the city of Knoxville was such that the loans could not be properly secured.

[fol. 406] That pursuant to the receipt of the aforesaid telegram from the Administrator directing the Tennessee Public Works Board to speed up action on the application of the city of Knoxville for a loan and gift of federal funds for the construction of a local electric distribution system, and on or about — —, 193-, the Tennessee Public Works Board disapproved the application of the City of Knoxville for a loan and grant of federal funds through the Public Works Administration for the construction of a mu-

nicipal electric distribution system to use TVA power, upon the ground that the general revenue bonds to be issued by the city of Knoxville to the Public Works Administration for the loan would not be properly secured because of the impaired credit and poor financial condition of the city of Knoxville.

That thereafter, and subsequent to advice given to the city officials, orally or in writing, (a true copy of such writing being attached hereto as Exhibit E), by the Tennessee Valley Authority and the Administrator, the city appealed from the action of the Tennessee Public Works Board to the Administrator; and that on — —, 193—, the Administrator and the President approved the application of the city of Knoxville for a loan and grant of federal funds through the Public Works Administration for the construction of an electric distribution system in the city of Knoxville to use TVA power, in the total amount of \$2,600,000, of which \$600,000 was a gift, and that such approval was given subsequent to conferences and written communications between David E. Lilienthal and other representatives of the Tennessee Valley Authority and the Administrator or his agents, true copies of all telegrams, letters or other written communications passing between the Tennessee Valley Authority or any of its officers or agents and the Administrator or any of his agents with reference thereto being attached hereto as Exhibit F-1, etc.

That subsequent to the approval of the application of the city of Knoxville for a loan and grant of federal funds through the Public Works Administration for the construction of an electric distribution system in the city of Knoxville, the Tennessee Valley Authority informed the Public Works Administration that the Tennessee Valley Authority and the City of Knoxville were attempting to negotiate the purchase of the facilities of the Tennessee Public Service Company in and about the city of Knoxville; that pursuant to such information, and at the request of the Tennessee Valley Authority, the execution of a loan and grant agreement between the city of Knoxville and the Public Works Administration, pursuant to the approval of said application of said city, was held in abeyance awaiting the outcome of such negotiations; that PWA furnished such assistance as it could to the Tennessee Valley Authority to enable its negotiations for the purchase of such facilities

to be brought to successful fruition and so advised TVA in a letter dated March 8, 1934 which is Exhibit 87-E in the testimony of Horatio B. Hackett taken in this cause; that when David E. Lilienthal advised the Public Works Administration of the refusal of the Tennessee Public Service Company to accept the offer of the city of Knoxville for its facilities in said city, supplemented by the offer of the Tennessee Valley Authority for certain of the outlying properties of said utility (a true copy of which letter, dated March 22, 1934, is hereto attached, marked Exhibit G), the Public Works Administration accepted such statement as satisfactory evidence of the inability of the city [fol. 407] of Knoxville to purchase such facilities, which had been made a condition precedent to the making of a loan and grant agreement under the application of said city approved as aforesaid (a copy of which letter is attached as Exhibit 87-F to the testimony of Horatio B. Hackett in this cause); that thereupon and thereafter, and under date of April 2, 1934, the Public Works Administration entered into a contract with the city of Knoxville for a loan and grant of federal funds for the construction of a local electric distribution system in the city of Knoxville to use TVA power (a copy of said contract being Exhibit 87-A to the testimony of Horatio B. Hackett in this cause).

That thereafter said contract between the Public Works Administration and the city of Knoxville was continued in effect while the Tennessee Valley Authority for a period of more than three months attempted to negotiate for the purchase of the property of the Tennessee Public Service Company in Knoxville and in Eastern Tennessee, or for its sale to the city of Knoxville; that the Administrator, or his agents in the Public Works Administration, were kept informed by David E. Lilienthal, or other representatives of the Tennessee Valley Authority, of the progress of such negotiations, and that with the knowledge and consent to the Administrator said David E. Lilienthal and the Tennessee Valley Authority used said contract between the Public Works Administration and the city of Knoxville as a threat that unless the Tennessee Public Service Company would sell its facilities at a price acceptable to the Tennessee Valley Authority, a duplicate electric distribution system would be constructed in the city of Knoxville with federal funds provided by the Public Works Administration, with the result of greatly depreciating or

destroying the value of the facilities and business of the Tennessee Public Service Company in the city of Knoxville and surrounding territory.

That on July 26, 1934 the Tennessee Valley Authority entered into a contract with the Tennessee Public Service Company, subject to approval by the Tennessee Railroad and Public Utility Commission, for the purchase of the electric distribution and transmission facilities of the Tennessee Public Service Company in the city of Knoxville and in Eastern Tennessee; that the Administrator was duly advised by the Tennessee Valley Authority of the making of said contract; that the Administrator then, or shortly thereafter, advised David E. Lilienthal that the contract between the city of Knoxville and the Public Works Administration would be continued in effect until the transaction between the Tennessee Valley Authority and the Tennessee Public Service Company should have been consummated; and that the administrator did maintain the contract between the Public Works Administration and the city of Knoxville in effect until the Tennessee Valley Authority, having failed to effect the consummation of its contract with the Tennessee Public Service Company, withdrew from said contract with the Tennessee Public Service Company on October —, 1934; and that after the Tennessee Valley Authority had advised the Public Works Administration that the Tennessee Valley Authority had abandoned its attempt to purchase the facilities of the Tennessee Public Service Company in the city of Knoxville and Eastern Tennessee, the Public Works Administration did whatever it could to expedite and forward the carrying out of the contract between the Public Works Administration and the city of Knoxville for the construction of a local electric distribution system through a loan and grant of federal funds for the use of TVA power.

[fol. 408] That on December 15, 1933, the city of Decatur, Alabama, filed an application with the Public Works Administration (which is Exhibit 77 to the testimony of Horatio B. Hackett taken in this cause) for a loan and grant of federal funds for the construction of a municipal electric distribution system for the use of TVA electricity; that shortly thereafter the Public Works Administration sent a letter to Miss Margaret Owen, Washington repre-

sentative of the Tennessee Valley Authority (a true copy of which letter is attached hereto as Exhibit H), requesting information and advice from the Tennessee Valley Authority before action should be taken by the Public Works Administration on said application; that such information and advice was furnished to the Public Works Administration by David E. Lilienthal acting as director and general counsel of the Tennessee Valley Authority, in a letter dated April 6, 1934 (copy of which letter is Exhibit 77-B to the testimony of Horatio B. Hackett taken in this cause); that the aforesaid letter of David E. Lilienthal to the Public Works Administration stated, among other things, that "the Tennessee Valley Authority regards the serving of Decatur, Alabama, as particularly desirable in its development of the electric utility 'yardstick'"; that the attitude and desires of the Tennessee Valley Authority with reference to the application of the city of Decatur were taken into consideration by the Public Works Administration in passing upon said application; that thereafter the application of the city of Decatur for said loan and grant was approved by the Special Board of the Public Works Administration on August 15, 1934, and by the President on August 16, 1934, for the stated reason, among others, "that the Tennessee Valley Authority has acquired the necessary transmission lines to serve said distribution system and the financing of said project will aid said Authority in obtaining a market for its electrical energy" (Exhibit 99 to the testimony of Horatio B. Hackett taken in this cause); and that on December 6, 1934, a loan and grant agreement was executed between the Public Works Administration and the city of Decatur for the construction of an electric distribution system in said city for the use of TVA power.

That separate applications were filed by the city of Bessemer and the city of Tarrant City, Alabama, with the Public Works Administration on or about — —, 193—, for loans and grants of federal funds for the construction of electric distribution systems in said cities and a steam generating plant to supply the needs of said cities; that thereafter the Public Works Administration requested the Tennessee Valley Authority to inform the Public Works Administration whether or not the proposed steam plant would serve a useful purpose in and conform to the plans of the Tennessee Valley Authority for marketing its power in that area, and whether the approval of the

applications would be helpful by favorably affecting negotiations of the Tennessee Valley Authority for acquiring facilities of existing utilities in that area (Exhibit 88-B and Exhibit 88-C to the testimony of Horatio B. Hackett taken in this cause); that the Tennessee Valley Authority informed the Public Works Administration that the immediate approval of the applications upon the conditions (which had been suggested by Mr. Rau of the Electric Power Board of Review, a division of the Public Works Administration created by the Administrator) that construction work should be deferred until TVA power should [fol. 409] be available to serve said cities and that the amount of the loan and grant for the construction of electric distribution systems in said cities should be earmarked for that purpose, would further the TVA program (Exhibit 85-E to the testimony of Horatio B. Hackett taken in this cause); that thereafter and on the advice or request of the Public Works Administration said applications were revised so as to eliminate from the project the construction of a steam generating plant to supply electricity used by said cities and to substitute the construction of a transmission line approximately fifty miles long to connect with TVA transmission lines and provide TVA power to supply said cities; that thereafter, and on or about — —, 193-, said applications of the city of Bessemer and the city of Tarrant City were approved by the Public Works Administration for the construction of electric distribution systems in said cities and for the construction of a transmission line of approximately fifty miles in length to connect said distribution systems with transmission lines of the Tennessee Valley Authority (Exhibits 82-A and 83-A to the testimony of Horatio B. Hackett taken in this cause).

That on August 30, 1933, the cities of Sheffield and Tusculumbia, Alabama, and on November 15, 1933, the city of Florence, Alabama, severally filed applications with the Public Works Administration for loans and grants of federal funds for the construction of municipal electric distribution systems in each of said cities; that said applications were promptly approved by the Alabama State Board of the Public Works Administration and forwarded to the Administrator at Washington; that the Administrator shortly thereafter approved and made allotments upon each of said applications; that loan and grant agreements were not entered into between the Public Works Adminis-

tration and said cities of Florence, Sheffield and Tusculumbia until December 28, 1934; that the Public Works Administration, while making and maintaining allotments upon said applications pending the conclusion of negotiations which the Tennessee Valley Authority was carrying on for the purchase of the municipal distribution systems of the utility serving said cities, declined to enter into loan and grant agreements with said cities so long as said negotiations of the Tennessee Valley Authority were in progress; that after the failure of the negotiations of the Tennessee Valley Authority for the purchase of said municipal distribution systems, which was publicly announced by David E. Lilienthal on December 14, 1934, and on request of said David E. Lilienthal, the Public Works Administration expedited action on said applications and the execution of loan and grant agreements which were concluded with said cities for the construction of municipal electric distribution systems therein on December 28, 1934; that in the interim while TVA was attempting to purchase said municipal electric distribution systems of the existing utility at prices acceptable to TVA, the Public Works Administration declined to enter into loan and grant agreements with said cities; that the telegram from the Administrator to Mayor Lee Glenn of Florence, Alabama, dated July 11, 1934 (printed at page 64 of the Bill of Complaint) was sent after a conference with David E. Lilienthal.

[fol. 410] That from time to time after January 4, 1934 consideration and action on application for loans and grants of federal funds from Alabama towns for the construction of local electric distribution systems in the area covered by a certain contract between the Tennessee Valley Authority and the Alabama Power Company under date of January 4, 1934 were effected by advice from the Tennessee Valley Authority as to the existing status of its negotiations for the purchase of such properties; that allotments were made by the Public Works Administration upon applications of such towns for the construction of local electric distribution systems, and maintained pending the negotiations of the Tennessee Valley Authority for the purchase of the properties of the existing utilities in said towns, and that after the failure of such negotiations and on the request of David E. Lilienthal, consideration and action upon such applications was expedited by the Public Works Administration.

That the Administrator did whatever he could to help the Tennessee Valley Authority work out its problem of disposing of the electricity generated by it.

That counsel for Tennessee Valley Authority appeared as *amicus curiae* with counsel for the Public Works Administration in filing the brief in the Supreme Court of Alabama in the case of *Oppenheim v. City of Florence*, 229 Ala. 50, in support of the validity of the proposed revenue bonds to be issued by the city of Florence to PWA for the proposed PWA loan and grant to that town.

That the Administrator of Public Works regards that part of the Tennessee Valley Authority program relating to the generation, transmission and sale of power as constituting a part of the general policy and program of the National Administration.

That in 1935 he published a book entitled "Back to Work" as a "general accounting of what PWA has done and been during the almost two years of its existence", in which he says at page 130:

"PWA has approved the loans and grants to cities which wish to build transmission and distributing systems so that they can make use of cheap TVA power. Ten million dollars have been earmarked for this purpose, and one city, Knoxville, has been allotted \$2,600,000 for the improvement and extension of its own system. Additional appeals for aid have been received from scores of towns and cities whose local governments are wistful for low-cost TVA power, but which are unable to raise enough money to build a distribution system or buy out the existing utility that continues to charge unduly high rates.";

and that said statement is true and correct.

That in said book the Administrator further states at page 134:

[fol. 411] "This is the picture in broad outline of TVA at the present time. Soon, it is to be expected, the idea will be extended to other sections of the country. Moreover, TVA—and this is one of the main reasons for its establishment—will provide a 'yardstick' for the measurement of similar rates in other parts of the Nation, with the result of forcing pretty generally a reduction of private utility charges";

and that said statement is true and correct.

That Henry T. Hunt was Chairman of the Electric Power Board of Review of the Federal Emergency Administration of Public Works throughout the entire existence of said Board; that O. M. Rau was a member and the rate expert of the Electric Power Board of Review of the Federal Emergency Administration of Public Works throughout the entire existence of said Board; that B. W. Toren was an Assistant Finance Director of the Federal Emergency Administration of Public Works; that P. M. Benton was Financial Director of the Federal Emergency Administration of Public Works; That K. S. Wingfield was an employee in the financial division of the Federal Emergency Administration of Public Works; that H. M. Waite was the Deputy Administrator of the Federal Emergency Administration of Public Works; that Horatio B. Hackett is now the Assistant Administrator of the Federal Emergency Administration of Public Works; that Michael W. Strauss is the Assistant to the Administrator and Publicity Director of the Federal Emergency Administration of Public Works; that R. H. Elliott was a Director of the Federal Emergency Administration of Public Works; that Joel David Wolfsohn is the Executive Secretary of the National Power Policy Committee; that Maurice L. Cooke was the Vice Chairman of the National Power Policy Committee and was Chairman of the Mississippi Valley Committee of the Federal Emergency Administration of Public Works.

[fol. 412] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MEMORANDUM DECISION OVERRULING COMPLAINANTS' MOTIONS FOR LEAVE TO TAKE THE DEPOSITION OF HAROLD L. ICKES; FOR AN ORDER REQUIRING DEFENDANTS TO PRODUCE DOCUMENTS, OF, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME FOR THE TAKING OF TESTIMONY BEFORE THE SPECIAL MASTER; TO COMPEL DEFENDANTS TO PRODUCE DOCUMENTS AND PERMIT INSPECTION THEREOF—Filed September 29, 1937

1. With reference to the question of referring this case to a Master, without deciding whether the statute imposes upon the court the mandatory duty of hearing the testimony, or invests the court with discretion to refer it, the court has determined to hear all further testimony in the case,

because of the grave questions involved and as a matter of public policy. This action will also greatly expedite the final determination of the case by this court.

2. The motion for leave to take the deposition of Secretary Ickes is overruled.

3. The motion for extension of time to retake the deposition of James M. Carmody is overruled.

4. The motion to require the production of maps, documents and data is overruled.

Since the court has decided not to refer the further taking of testimony, it will insist upon most complete cooperation from the attorneys, and will require stipulations in every possible instance.

A per curiam memorandum opinion on the disposition of these motions will be filed herein. Appropriate orders will be drawn and entered:

(S.) Florence E. Allen, United States Circuit Judge.

(S.) John J. Gore, United States District Judge.

(S.) John D. Martin, United States District Judge.

[fol. 413] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER OVERRULING AND DENYING COMPLAINANTS' MOTION
FOR LEAVE TO TAKE DEPOSITION OF HAROLD L. ICKES—
Filed September 29, 1937

This matter came on to be heard upon the motion filed by the complainants, and upon briefs and argument by counsel, and the Court having considered the same, it is hereby Ordered, Adjudged and Decreed that said motion be, and the same is hereby overruled and denied, to which order of the Court the complainants duly reserved an exception.

(S.) Florence E. Allen, Circuit Judge. (S.) John J. Gore, District Judge. (S.) John D. Martin, District Judge.

At Nashville, Tennessee, this 27th day of September, 1937.

Approved for entry: Charles M. Seymour, Solicitor for Complainants. William C. Fitts, Jr., Solicitor for Defendants.

[fol. 414] IN UNITED STATES DISTRICT COURT

(Caption omitted)

**ORDER OVERRULING AND DENYING COMPLAINANTS' MOTION
TO COMPEL PRODUCTION OF DOCUMENTS AND PERMIT IN-
SPECTION THEREOF—Filed September 29, 1937**

This matter came on to be heard upon the motion filed by the complainants, and upon briefs and argument by counsel, and the Court having considered the same, it is hereby Ordered, Adjudged and Decreed that said motion be and the same is hereby overruled and denied, to which order of the Court the complainants duly reserved an exception.

(S.) Florence E. Allen, Circuit Judge. (S.) John J. Gore, District Judge. (S.) John D. Martin, District Judge.

At Nashville, Tennessee, this 27th day of September, 1937.

Approved for entry: Charles M. Seymour, Solicitors for Complainants. William C. Fitts, Jr., Solicitors for the Defendants.

[fol. 415] IN UNITED STATES DISTRICT COURT

(Caption omitted)

**ORDER OVERRULING AND DENYING COMPLAINANTS' APPLICATION
FOR AN ORDER REQUIRING DEFENDANTS TO PRODUCE
DOCUMENTS OR, IN THE ALTERNATIVE, FOR EXTENSION OF
TIME FOR TAKING TESTIMONY BEFORE SPECIAL MASTER—
Filed September 29, 1937**

This matter came on to be heard upon the motion filed by the complainants, and upon briefs and argument by counsel, and the Court having considered the same, it is hereby Ordered, Adjudged and Decreed that said motion be, and the same is hereby overruled and denied, to which order of the Court the complainants duly reserved an exception.

Florence E. Allen, Circuit Judge. John J. Gore, District Judge. John D. Martin, District Judge.

At Nashville, Tennessee, this 27th day of September, 1937.

Approved for Entry: Charles M. Seymour, Solicitors for Complainants. William C. Fitts, Jr., Solicitors for Defendants.

[fol. 416] IN UNITED STATES DISTRICT COURT

(Caption omitted)

SUPPLEMENT TO BILL OF PARTICULARS—Filed October 21,
1937

Now come the complainants by their solicitors and as a Supplement to the Bill of Particulars hereinbefore filed on August 6th, 1937, state that the defendants, pursuant to a stipulation heretofore made between the parties hereto and filed herein on the 14th day of August, 1937, have either (a) produced and delivered to complainants authenticated copies, or (b) admitted the authenticity of documents emanating from defendants and submitted by complainants to defendants for such authentication, of a large number of press releases, published articles and published speeches of one or another of the defendants made or published subsequent to the passage of the Tennessee Valley Authority Act of 1933 and prior to the 1st day of October, 1937, in which one or another of defendants have stated or represented to the public that the so-called "yardsticks" of defendant Tennessee Valley Authority were and are fair measures of reasonable and compensatory rates for electric service; that the rates of Tennessee Valley Authority embodied all the charges and to the same degree that a privately owned utility was and is subject to in determining its rates; that the Tennessee Valley Authority rates were lower only because privately owned utilities rates were unfair and unconscionable in that provision was made therein for the payment of dividends on watered stock and to support dizzy towers of inflated capitalization and to pay excessive executive salaries and holding company charges; that the management of privately owned utilities were likened to robber barons that had exploited and levied tribute on the public for years, and defendants have repeatedly exhorted members of the public to support, cooperate with and assist Tennessee Valley Authority in putting an end to such practices of the privately owned utilities companies, all in an effort to carry out the purpose and design set forth in said Bill of Complaint. Such press releases, published speeches and published articles have been produced and authenticated by defendants and complainants allege that such press releases, published articles and published speeches are particular

instances of acts of the character with which defendants are charged in Paragraph XXI of complainants' Bill of Complaint.

Complainants further state that additional instances of acts of the character with which defendants are charged in Paragraph XXI of said Bill of Complaint are statements in the testimony of certain of said defendants given before certain committees of the Congress of the United States from and after the passage of the Tennessee Valley Authority Act of 1933, including several Hearings before the Subcommittee of the Committee on Appropriations of the House of Representatives and of the Senate, Hearings before the Committee on Military Affairs of the House of Representatives, Hearings before the Committee on Interstate Commerce of the House of Representatives, Hearings before the Committee on Rivers and Harbors of the House of Representatives, and Senate Agricultural and Forestry Hearings on the so-called Seven Tennessee Valley Authority Bills, containing representations similar in character to those hereinbefore described, all of which is well known to defendants and that the authenticity of the published re-[fol. 417] ports of each of said Committees has been admitted under the Stipulation of August 14, 1937, hereinbefore referred to.

Baker, Hostetler, Sidlo & Patterson; Trabue, Hume & Armistead; Frantz, McConnell & Seymour, Solicitors for Complainants.

I certify that a copy of the foregoing has been furnished to opposing counsel.

Charles D. Snapp.

[fol. 418] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MEMORANDUM OPINION ON COMPLAINANTS' MOTION TO REQUIRE DEFENDANTS TO PRODUCE DOCUMENTS AND PERMIT INSPECTION THEREOF: FOR AN ORDER REQUIRING DEFENDANTS TO PRODUCE DOCUMENTS, OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME FOR TAKING TESTIMONY BEFORE SPECIAL MASTER: FOR LEAVE TO TAKE THE DEPOSITION OF HAROLD L. ICKES.—Filed November 1, 1937

Before Allen, Circuit Judge, and Gore and Martin, District Judges

Per CURIAM:

This case came on to be heard upon certain motions filed by complainants. We deny the motions described below for the following reasons:

(1) The motion to require production of documents, maps and data is overruled for the reason that no interrogatories were filed, as required by Equity Rule 58.¹ Since the inter-

¹ Rule 58. "The plaintiff at any time after filing the bill and not later than twenty-one days after the joinder of issue, and the defendant at any time after filing his answer and not later than twenty-one days after the joinder of issue, and either party at any time thereafter by leave of the court or judge, may file interrogatories in writing for the discovery by the opposite party or parties of facts and documents material to the support or defense of the cause, with a note at the foot thereof stating which of the interrogatories each of the parties is required to answer. . . ."

"Interrogatories shall be answered, and the answers filed in the clerk's office, within fifteen days after they have been served, unless the time be enlarged by the court or judge. Each interrogatory shall be answered separately and fully and the answers shall be in writing, under oath, and signed by the party or corporate officer interrogated. Within ten days after the service of interrogatories, objections to them, or any of them, may be presented to the court or judge, with proof of notice of the purpose so to do, and answers shall be deferred until the objections are determined, which shall

[fol. 419] rogatories were filed, and consequently no answers could be made thereto, the record contains no admission that the Tennessee Valley Authority has possession of the documents sought. Under Equity Rule 58, such an admission is a prerequisite to the issuing of the order to produce. *Dixie Drinking Cup Co., Inc., v. Paper Utilities Co., Inc.*, 5 Fed. (2d) 322 (D.C.); *Fidelity & Deposit Co. of Maryland v. Central Bank*, 48 Fed. (2d) 477 (C.C.A. 8); *Pressed Steel Car Co. — Union Pacific Rd. Co.*, 241 Fed. 964 (D.C.). An additional reason for this ruling is that this motion "serves the same purpose as that formerly obtainable by bill of discovery" (*Keaton v. Kennamer*, 42 Fed. (2d) 814, 815). It can not be used for "a mere fishing expedition, nor for impertinent intrusion. The inquiry must be confined to material matters of fact and not extended to a disclosure of evidence or of facts which merely tend to prove ultimate material facts, or to elicit the names of witnesses." *Keenan v. Texas Production Co.*, 84 Fed. (2d) 826 (C.C.A. 10). Cf. *Sinclair Refining Co. v. Jenkins Petroleum Process Co.*, [fol. 420] 289 U. S. 689, 696, 697. The data sought to be produced constitutes evidentiary detail and minutiae; but the disclosure must be of the ultimate facts. *Maywood v. Texas Co.*, 17 Fed. (2d) 490 (D. C.); *May v. Midwest Refining Co.*, 10 Fed. Supp. 927; *Day Co. v. Mountain City Mill Co.*, 225 Fed. 622 (D. C.).

(2) The motion for an order requiring defendants to produce documents, or in the alternative, for extension of time for taking testimony before special master, is also denied. No interrogatories were filed and no answers appear showing that these documents are in the possession of the Tennessee Valley Authority. The motion really seeks to secure certain papers conceded to be in the possession of John M. Carmody, Administrator of Rural Electrification Administration. A subpoena duces tecum was issued July 27, 1937,

be at as early a time as is practicable. In so far as the objections are sustained, answers shall not be required.

"The court or judge, upon motion and reasonable notice, may make all such orders as may be appropriate to enforce answers to interrogatories or to effect the inspection or production of documents in the possession of either party and containing evidence material to the cause of action or defense of his adversary. • • •"

by the District Court of the District of Columbia, to compel the production by Carmody of numerous letters and papers in his possession as head of the Rural Electrification Administration. It called for all correspondence between the Tennessee Valley Authority, its officers, directors or employees, and Rural Electrification Administration and any of its officers, directors or employees, relating to, discussing or having to do with the making or any of the terms of any contracts or agreements between Rural Electrification Administration and certain co-operatives. Rural Electrification Administration and the co-operatives listed are not parties to this controversy. Carmody, under the advice of counsel, claimed that the subpoena was invalid, asserted his privilege, and refused to produce the documents. Complainants' remedy obviously is in the District Court of the [fol. 421] District of Columbia. The witness is not before this court, and the subpoena was not issued by this court. These matters must be determined in the court from which the subpoena issued. In *re Allis*, 44 Fed. 216; *Crocker-Wheeler Co. v. Bullock*, 134 Fed. 241 (D. C.).

(3) The motion for leave to take the deposition of Secretary Harold L. Ickes is refused. The case was set for trial when the motion was filed, and Equity Rule 56² governs. Complainants had between January 23, 1936, and August 25, 1937, to take this deposition. The "strong reason" required under Equity Rule 56 for excusing the delay is not set forth. It does not appear that Secretary Ickes was ill on July 28, 1937, at the time when certain depositions were taken by these complainants in Washington, nor does it appear that Secretary Ickes was not then in Washington.

(S.) Florence E. Allen, Circuit Judge. (S.) John J. Gore, District Judge. (S.) John D. Martin, District Judge.

² Rule 56. "After the time has elapsed for taking and filing depositions under these rules, the case shall be placed on the trial calendar. Thereafter no further testimony by deposition shall be taken except for some strong reason shown by affidavit. In every such application the reason why the testimony of the witness cannot be had orally on the trial, and why his deposition has not been before taken, shall be set forth, together with the testimony which it is expected the witness will give."

[fol. 422] IN UNITED STATES DISTRICT COURT

(Caption omitted)

PETITION FOR REHEARING MOTION TO TAKE THE DEPOSITION
OF HAROLD L. ICKES—Filed November 12, 1937

The complainants being much aggrieved by the order entered in this cause on September 29, 1937, and the opinion filed on November 1, 1937, denying complainants leave to take the deposition of Harold L. Ickes, respectfully file this their petition to rehear said motion for the following reasons, viz:

(1) The Court has erroneously interpreted the state of the record in holding that complainants had from January 23, 1937, to August 25, 1937, to take the deposition of Harold L. Ickes. The record shows that:

The original bill was filed on May 29, 1936, in the Chancery Court of Knox County, Tennessee, and process was served and returned the same day.

On June 15, 1936, defendants removed the case to this court, and thereafter on July 15, 1936, filed with the Clerk [fol. 423] of this Court the transcript from said Chancery Court.

On August 14, 1936, defendants filed a motion to quash the service of process and dismiss the bill for lack of jurisdiction, which motion was heard orally on September 11th and October 10th, 1936, and on October 19, 1936, the motion was overruled.

On October 20, 1936, defendants filed another motion to dismiss attacking the bill principally on the ground that it failed to state a cause of action, and same was overruled November 9, 1936.

On November 24, 1936, defendants filed their answer, and on December 11, 1936, complainants' motion for a preliminary injunction came on to be heard, and on December 22, 1936, the order granting such injunction was entered and defendants perfected their appeal to the Circuit Court of Appeals for the Sixth Circuit, at Cincinnati. On appeal, defendants assigned as error the Court's actions in overruling the two said motions. At the time this appeal was perfected, the case was set for trial on its merits on March 8, 1937, but since defendants on appeal raised the question of jurisdiction, as well as the points raised by the motion

to dismiss, the trial on the merits was postponed until said Appellate Court considered the questions raised by said two motions, for the reason that if on appeal the Court should be of the opinion that error had been committed in not sustaining the motions, or either of them, the District Court and the parties would not have been put to the time and expense incident to such trial.

On January 19, 1937, a consent order was entered providing that the time allowed for taking depositions under Equity Rule 47 should be computed from March 1, 1937, and not from the date of the filing of the defendants' answer.

The transcript of record on appeal was filed with the Clerk of the United States Circuit Court of Appeals on or about March 6, 1937, and defendants filed a motion to advance [fol. 424] the hearing in said court, and the appeal was set for argument on April 16, 1937.

On March 18, 1937, another consent order was entered in the District Court, providing that the time for the taking of depositions should be computed from May 1, 1937. On May 18, 1937, the Circuit Court of Appeals decided the questions that had been presented to it on defendants' appeal, and defendants shortly thereafter filed a petition for certiorari in the Supreme Court of the United States. The petition was denied by the Supreme Court of the United States on or about June —, 1937, and the mandate from the Circuit Court of Appeals to the District Court was returned June 14, 1937.

On June 12, 1937, defendants filed a motion to strike portions of the bill of complaint and also a motion for a bill of particulars. Said motions were heard by the District Judge on or about June 18, 1937, and at that time there was discussed in open court by counsel representing both complainants and defendants the question of the appointment of a Master, and it was then agreed in open court between the parties that complainants would have the month of July, 1937, within which to take their depositions, and on July 3, 1937, there was filed in this cause an agreed order appointing Hal H. Clements, Jr., Special Master, for the purpose of taking depositions. Said Hal H. Clements, Jr., was attending a military camp at or near Atlanta, Georgia, and returned therefrom on or about July 17, 1937, and counsel for complainants proceeded on July 20, 1937, with the taking of depositions before the

Special Master in Georgia, Alabama and Tennessee, and on July 28, 1937, with the taking of depositions before the Special Master in Washington, D. C.; that at the time the depositions in Washington, D. C., were taken between the dates of July 28, 1937, and July 31, 1937, counsel for com-[fol. 425] plainants had an understanding with counsel for defendants that the taking of the deposition of Harold L. Ickes would be deferred, for reasons fully set forth in the affidavit of Raymond T. Jackson filed as Exhibit "B" to the motion. By subsequent agreements with counsel for defendants, the time within which the deposition of Harold L. Ickes might be taken by consent was extended to the 25th day of August, 1937. On August 23, 1937, an effort was made to subpoena said Harold L. Ickes and said subpoena was served on G. G. Madigan, who had been previously designated by Mr. Ickes to accept service of subpoenas directed to Mr. Ickes on matters relating to Public Works Administration, but counsel for complainants were advised that Mr. Ickes had left Washington on August 21, 1937, for a short rest, and his whereabouts could not be ascertained, all as is more fully shown in said affidavit of Raymond T. Jackson.

(2) It further appears from said affidavit that Harold L. Ickes had been ill during the month of July and a considerable part of the month of August, 1937; that he had devoted all of his time which he was physically able to devote to his official duties a short time before the adjournment of Congress in order to dispose of certain necessary matters pertaining to pending litigation which had to be taken care of prior to adjournment of Congress, and that immediately upon Congress' adjournment, Mr. Ickes left Washington for a short rest and period of recuperation. All of the foregoing facts appear at page 7 of the affidavit of Raymond T. Jackson filed in support of said motion and are not denied in the affidavit of Mr. James Lawrence Fly filed in opposition to said motion.

[fol. 426] It is respectfully submitted that the foregoing constitute more than a sufficiently "strong reason" under Equity Rule 56 to warrant the Court in granting said motion for leave to take the deposition of Harold L. Ickes.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour.

[fol. 427] *Duly sworn to by Charles M. Seymour. Jurat omitted in printing.*

We certify that a copy of the foregoing has been furnished to opposing counsel.

Charles M. Seymour.

[fol. 428] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION FOR LEAVE TO TAKE DEPOSITION OF HAROLD L. ICKES—
Filed December 6, 1937

Now come the Complainants, by their solicitors, and respectfully move the Court for an order permitting the Complainants to take the deposition of Harold L. Ickes at the earliest practicable date to be used as evidence on behalf of Complainants herein, pursuant to the ruling of this Court, that when a state of facts has developed requiring the renewal of this motion, another motion may be made, (Transcript, p. 1):

“If during the course of this case a new state of facts should develop, permission will be given Complainants to renew the motion.”

In compliance with the requirements of Equity Rule 56, Complainants state the following reasons for the renewal of said motion at this time, to wit:

[fol. 429] I. Reasons for Taking Deposition of Harold L. Ickes

The strong reasons requiring the granting of this motion to take the deposition of Harold L. Ickes are based upon the allegations contained in Complainants' Bill, respecting said Harold L. Ickes, the evidence already introduced in this case by Complainants respecting the participation for said Harold L. Ickes in the unlawful plan and conspiracy alleged, the evidence Complainants now have available to offer respecting the participation by said Harold L. Ickes in the unlawful plan and conspiracy, and the statements respect-

ing the participation of said Harold L. Ickes in the unlawful plan and conspiracy already put into this record by the Defendants in Exhibit "K" attached to and made a part of their answer.

A. Allegations in Complainants' Bill:

1. It is alleged in Section XII of Complainants' Bill that a National Power Policy was formulated late in 1932 or early in 1933 in furtherance of which the Tennessee Valley Authority Act was passed and other governmental agencies, among them the Federal Emergency of Public Works, were organized and that such agencies have been and to now are engaged in carrying out various phases of said National Power Policy.

2. It is further alleged in Section XIX of Complainants' Bill that the Defendants have adopted an unlawful plan and have cooperated and threatened to continue to cooperate in the execution thereof with said Harold L. Ickes, as Administrator of the Federal Emergency Administration of Public Works, to carry on a systematic competition with Complainants and to coerce and intimidate Complainants as owners of distribution systems or transmission lines in municipalities or territories in which the Tennessee Valley Authority desires to seize the market, to sell such distribution systems and transmission lines either to the Tennessee Valley Authority or the municipalities at prices arbitrarily fixed by the Defendants and far below the fair value of the [fol. 430] properties sought to be taken, and that to effectuate such plan the Defendants informed the owners of the properties desired that unless they sell such property at a price arbitrarily fixed by Defendants, either the Tennessee Valley Authority or the respective municipalities would build a duplicate distribution system with federal funds and by such subsidized competition render the property of the recalcitrant companies valueless except for junk, and in order to make such coercion and intimidations effective said Harold L. Ickes authorizes and announces a gift to the municipality of 30% to 45% of the cost of such duplicate system and agrees to furnish the balance of such cost out of federal funds borrowed on the credit of the United States and repayable, if at all, only out of the earnings, if any, of the duplicate plant, or upon condition that the municipality shall agree to use Tennessee Valley Authority power and

will, as soon as legally possible, oust the existing utility from the municipality; that such allotments of gifts and loans are made available if the utility refuses to surrender its property on the Defendants' terms, but if and so long as the utility agreed to meet the Defendants' terms, such allotments are cancelled regardless of the wishes of the municipality or held in abeyance until such time as the so-called sale can be consummated and numerous towns are named in which such allotments have been made.

3. It is further alleged in the Bill that such cooperation and acts on the part of the Defendants and said Harold L. Ickes are a perversion and misuse of the power, if any, vested in said Defendants under and by virtue of the Tennessee Valley Authority Act.

B. Evidence Already Introduced in This Case by Complainants:

1. It is now in evidence in this case that the Public Works Administration made a loan and grant to the city of Memphis, Tennessee, of approximately \$9,000,000., which was later reduced to a grant of more than \$3,000,000. for the purpose of enabling the City of Memphis to construct a municipal system for the distribution of electricity (Testimony of Mr. Walter Ford, Transcript p. 1757 et seq.)

2. It also appears in evidence that the Public Works Administration made a loan and grant to the City of Knoxville, Tennessee, in the amount of \$2,600,000. of which [fol. 431] \$600,000. was a grant to enable the City of Knoxville to construct a municipal distribution system, which loan was made in the spring of 1934 and which was held in abeyance pending the negotiations and consummation of the sale of the property of Tennessee Public Service Company to the Tennessee Valley Authority (Testimony of Robert Lamar, Transcript p. 1774-7).

3. It further appears in evidence that the Tennessee Valley Authority has contracts with both the City of Memphis and the City of Knoxville for the sale of Tennessee Valley Authority power to be distributed through a municipal distribution system (Complainants' Exhibit 117 and 118.)

4. It further appears in evidence that a Public Works Administration loan has been made to the City of Chatta-

nooga and that Chattanooga has a contract to purchase Tennessee Valley Authority power (Complainants' Exhibit 129).

5. It further appears that the agreements reached between the Tennessee Valley Authority and the privately owned utilities' companies, whereby the Tennessee Valley Authority would purchase the facilities of the private utilities, was, in reality, an agreement reached under duress (Complainants' Exhibit 119, pp. 162-3).

6. It further appears in evidence that the City of Paris, Tennessee, has received a Public Works Administration loan and grant (Testimony of Frank B. Ostermueller, Transcript, p. 1266) and that a contract exists between the Tennessee Valley Authority and the City of Paris, Tennessee, for the purchase of Tennessee Valley Authority power (Complainants' Exhibit 134).

C. Evidence Complainants Now Have Available to Offer :

1. It will appear from evidence Complainants now have available to offer that Mr. Lilienthal stated to the Military Affairs Committee of Congress in 1935 in answer to a question—"You have frequently told those fellows, have you not, that public funds were available through the Public Works Administration and the Tennessee Valley Authority to aid the City in putting up a plant in competition with them?" Mr. Lilienthal—"It was not necessary to tell them. The availability of Public Works Administration funds for power projects was known to the utility representatives."

[fol. 432] 2. It will further appear from documentary evidence, constituting a part of depositions that have been taken and will be offered by complainants, that the Public Works Administration in considering applications for loans and grants to cities for the construction of electric generating, transmission or distribution systems gave paramount weight to the purposes and desires of the Tennessee Valley Authority in the furtherance of its so-called "yardstick" regulation and to enable TVA to acquire such facilities of privately owned utilities as it desired at its own price.

3. It will further appear that the Public Works Administration has made loans and grants for power projects to the following cities in Alabama, all of which will use Tennessee

Valley Authority power and now have contracts with the Authority for such power; Sheffield, Courtland, Decatur, Hartselle, Muscle Shoals, Russellville, Guntersville, Tarrant City, Bessemer; and the following cities in Tennessee: Memphis, Knoxville, Lewisburg, Columbia, Chattanooga, Newbern, Paris, Lenoir City, Jackson, Fayetteville and Clarksville; and in Mississippi: Starkville, Okolona and Aberdeen.

D. The statements Already Put Into the Record respecting the Participation of said Harold L. Ickes in the Unlawful plan and conspiracy, as Contained in Exhibit "K" to Defendants' Answer:

1. It will appear from evidence that from the stipulation respecting the testimony of said Harold L. Ickes (Exhibit "K" to Defendants' Answer, pp. 683-4) the telegram, quoted in p. 64 of the Complainants' Bill and admitted in Defendants' answer, was sent after a conference between said Ickes and David E. Lilienthal.

2. It will further appear that prior to November 1, 1933, said Lilienthal had conferred with said Ickes and that the latter had expressed a willingness to consider in a cooperative manner applications for loans in the Tennessee Valley Authority area for municipal electric systems where towns had entered into contracts for power with the Tennessee Valley Authority.

[fol. 433] 3. It will further appear that from time to time after January 4, 1934, consideration and actions upon applications for loans and grants from Alabama towns in the area covered by the contract of that date between the Alabama Power Company and the Tennessee Valley Authority were effected by advice from the Tennessee Valley Authority as to the existing status of negotiations for the purchase of such properties.

4. It will further appear that from December, 1934, after the letter of advice from the Tennessee Valley Authority to the cities in Alabama consideration and action upon such applications was expedited.

5. It will further appear that the reference in the Chattanooga Times of November 19, 1934, quoting Mr. Ickes as stating that the power companies have instituted suit and

are using the money of the companies "to go into Court with dummy lawsuits in an effort to stop the inevitable" was a correct quotation and that said Harold L. Ickes regards that part of the Tennessee Valley Authority program relating to the generation, transmission and sale of power as constituting a part of the general policy and program of the National Administration.

II. Reason Why Said Harold L. Ickes Cannot Orally Testify

The reason why said Harold L. Ickes cannot orally testify before this Court is that he resides in Washington, D. C. and is consequently outside of the jurisdiction of this Court and beyond the one hundred mile limit for the service of subpoena from this Court.

III. Reason Why the Deposition of Said Harold L. Ickes Was Not Previously Taken

Though the issues in this case were made up a year ago the Defendants almost simultaneously with the filing of their answer filed an appeal from the order of the District Court granting a preliminary injunction to the Complainants, which was not finally determined until some time in June of [fol. 434] 1937. During this interval by agreement of the parties, which was embodied in a consent order by the Court, the time for taking depositions was extended. Before that time had expired, the District Court made an order appointing a Special Master before whom evidence desired by either of the parties should be taken by deposition. Complainants proceeded to take evidence before such Special Master at the earliest practicable date and continued to take such evidence up to and including the 31st day of July, 1937, at which time, by reason of the understanding between the parties, the Complainants' time to take depositions was to expire. In the meantime and during the month of July, 1937, Complainants reached an agreement with the Defendants that if it became necessary (that is, if the parties could not agree upon a stipulation) to take the deposition of Secretary Ickes, Defendants would consent to have Complainants take such deposition at some date after the 31st of July, 1937.

By subsequent agreements Defendants consented to have the Complainants take such deposition as late as August 25, 1937. Counsel for both parties knew that Secretary Ickes had been ill, that Congress was in session, that extraordinary demands were being made upon Secretary Ickes' time and energy and counsel for Complainants were desirous of reaching a stipulation to obviate the necessity of taking such deposition, if possible. Congress adjourned on Saturday, August 21, 1937, and on Monday, August 23, 1937, counsel for Complainants attempted to have a subpoena served on Secretary Ickes to cause him to appear for such deposition before the Special Master but were informed that he had left Washington for a much needed rest immediately upon the adjournment of Congress and would not [fol. 435] return for a period of from two to three weeks. On the same date, to wit, August 23, 1937, counsel for Complainants tendered to counsel for Defendants a suggested stipulation which, it was hoped, would obviate the necessity of taking such deposition. Such stipulation was refused by counsel for Defendants.

By the time Secretary Ickes returned to Washington the statute providing for this case to be heard by three judges had been passed and signed by the President and the day that counsel for Complainants received notice that the presiding judge of the Circuit Court of Appeals for the Sixth Circuit had designated the judges who should comprise the court before whom this case would be heard, counsel for Complainants filed a motion for leave to take the deposition of Secretary Ickes, which motion was heard at Nashville, Tennessee, by this court on September 27, 1937, and denied. Thereafter counsel for Complainants filed an application for rehearing on said motion which was denied by this Court on November 15, 1937, with leave given, however, to renew the same if during the course of this hearing a new state of facts should develop. A more complete statement of the reasons why Complainants did not proceed to take the deposition of Secretary Ickes prior to August 25, 1937, appears from the affidavit of Raymond T. Jackson, one of counsel for Complainants, attached to and filed with the motion to take such deposition, which was filed in this court on or about September 18, 1937, to which reference is hereby made.

IV. The Testimony Which Said Harold L. Ickes is Expected to Give

The nature, character and substance of the evidence which it is expected said Harold L. Ickes will testify to is as follows:

[fol. 436] A. Said Harold L. Ickes is now and has been since July 12, 1933, the duly appointed, qualified and acting Administrator of the Federal Emergency Administration of Public Works and is now and at all times has been the Chairman of the National Power Policy Committee since that Committee was created in the Public Works Administration by order of the President on July 9, 1934.

B. Prior to November 1, 1933, David E. Lilienthal conferred with said Harold L. Ickes with reference to the making of loans and grants of federal funds through the Public Works Administration to municipalities or other public bodies for the construction of electric distribution systems to use Tennessee Valley Authority power and that said Ickes expressed his willingness to cooperate with the Tennessee Valley Authority where loans and gifts of federal funds through the Public Works Administration would aid or assist the Tennessee Valley Authority in carrying out its power policy by considering in a cooperative manner applications for loans and gifts of federal funds to municipalities which had entered or would enter into contracts with Tennessee Valley Authority for the use and distribution of electricity produced by it.

C. Prior to November 2, 1933, said David E. Lilienthal brought to the attention of said Harold L. Ickes a letter written by Harry Berry, Engineer of the Tennessee Public Works Board, in which Mr. Berry stated to Mr. Lilienthal that it was his understanding that no federal funds would be used for the construction of a duplicate power plant in a municipality; that upon receipt of notice of said letter said Ickes wrote said Berry instructing him that his statement was incorrect.

D. Upon the filing of an application of the City of Knoxville, Tennessee, for a loan and grant said Harold L. Ickes stated on November 29, 1935, that Knoxville would have a good chance of getting such a loan and that "PWA would discuss the Knoxville situation with Tennessee Valley Au-

thority officials because the latter was so deeply concerned with the problem" and that the nature of the concern expressed by Tennessee Valley Authority officials was that Tennessee Valley Authority should secure a market for electricity in Knoxville and the surrounding area; that said Ickes expedited the application of the said City of Knoxville through the Tennessee Public Works Board stating as his reason therefor, among other things, that Knoxville, "was the largest city that had decided to join the Governments' 'yardstick' program in the Valley"; that said application of the City of Knoxville was disapproved by the Tennessee Public Works Board but that said Ickes, upon receipt thereof, approved said application in the amount of \$2,600,000, of which \$600,000 was a gift and that such ap-[fol. 437] proval was given subsequent to conferences and communications between said David E. Lilienthal and other representatives of the Tennessee Valley Authority; and that subsequent thereto the allotment of said loan and grant was held in abeyance by Public Works Administration until such time as the Tennessee Valley Authority reached an agreement with Tennessee Public Service Company for the purchase of Tennessee Valley Authority of a part of said Company's distribution and transmission properties in and about the City of Knoxville, and thereafter held in abeyance pending the consummation of said contract and is still being held.

E. With respect to cities in North Alabama David E. Lilienthal urged said Harold L. Ickes to expedite the making of loans and grants on said applications and that said applications were expedited; that said Lilienthal on or about March 1934, on account of some uncertainty as to the character and security of the bonds that said Alabama cities were authorized to issue under the statutes of Alabama to secure the loan of public funds from the Public Works Administration, said Lilienthal submitted to said Ickes a plan which said Ickes approved in principle whereby Tennessee Valley Authority would purchase the transmission and distribution properties of the privately-owned utility then serving said towns and the applications of said towns were held in abeyance to assist said Tennessee Valley Authority to consummate such a plan and to compel the municipality to accept said plan of Tennessee Valley Authority rather than to go forward with the construction

of municipal distribution systems and that after conferences between said Ickes and said Lilienthal and in order to compel the City of Florence, Alabama, to accept the plan which the Tennessee Valley Authority desired to consummate, the telegram set forth at p. 64 of Plaintiffs' Bill of Complaint was sent by said Ickes; that when advised by said Tennessee Valley Authority that it was being delayed by litigation in the consummation of said plan to purchase said property the making of Public Works Administration loans and grants to said cities was expedited and that such loans and grants of federal funds was shortly thereafter made.

F. The applications of Bessemer and Tarrant City, Alabama, originally provided for the use of Tennessee Valley Authority power; that after the execution of the contract of January 4, 1934, between Alabama Power Company and the Tennessee Valley Authority said applications were amended to provide for said cities constructing their own generating systems; that said applications were not acted upon by Public Works Administration until such applications were further amended to again provide for the distribution of Tennessee Valley Authority power, all of which was done after consultation with and approval of officials of Tennessee Valley Authority; that the Public Works Administration loans and grants that have been made to the [fol. 438] Cities in Mississippi, Tennessee and Alabama for the construction of electric distribution systems in said states have, with a few minor exceptions, been made with the knowledge that said cities propose to distribute power generated and purchased from Tennessee Valley Authority and have been made as a means of assisting said Tennessee Valley Authority either to obtain or to effectuate such contracts or to enable said Tennessee Valley Authority to acquire the distribution and transmission facilities of the privately-owned utility companies in each of said cities.

G. Said Harold L. Ickes, out of the funds of the Federal Emergency Administration of Public Works, has earmarked at least \$10,000,000 for the purpose of making loans and grants to cities who desire to purchase Tennessee Valley Authority power and distribute it through municipally-owned distribution systems and that said Ickes has consistently assisted Tennessee Valley Authority to attain its

announced purpose of acquiring a market for the distribution of electric energy generated by it within transmission distance from the electric generating plants of said Authority.

Wherefore, Complainants pray the Court for an order granting said motion and designating a time within which Complainants may proceed to take the deposition of said Harold L. Ickes at Washington, D. C. or at such other place where said witness may be found, before the Special Master, heretofore appointed in this case, or under such other terms and conditions as to this Court may seem just and proper in the premises and as this Court may direct.

Frantz, McConnell & Seymour, Trabue, Hume & Armistead, Baker, Hostetler, Sidlo & Patterson,
Counsel for Complainants.

December 6, 1937.

[fol. 439] IN UNITED STATES DISTRICT COURT

[Title omitted]

AFFIDAVIT REQUIRED BY EQUITY RULE 56

STATE OF TENNESSEE,

County of Hamilton, ss:

Sidney D. L. Jackson, being first duly sworn, deposes and says:

That he is one of the Counsel for the Complainants in the above entitled action; that he has read the motion to which this affidavit is attached; that said motion is not filed for the purpose of delay; that the time for taking depositions in the above action as fixed by Equity Rule 47 has expired, and that the deposition of Harold L. Ickes is necessary to fully prove Complainants' cause of action herein, as more fully appears from the references hereinabove made in Part I of the attached motion to take said deposition; that the testimony of said Harold L. Ickes cannot be taken orally at the trial for the reasons more fully set forth in Part II of the attached motion; that the reason why the [fol. 440] deposition of said Harold L. Ickes has not been taken previously is accurately set forth in Part III of the attached motion; and that said Harold L. Ickes is expected

by Complainants to testify substantially as set forth in Part IV of the attached motion. Further affiant sayeth naught.
(S.) Sidney D. L. Jackson.

Sworn to and subscribed before me, a Notary Public,
on this 6th day of December, 1937. (S.) Dorothy
Murphy, Notary Public. (Seal.)

[fol. 441] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION OF COMPLAINANTS TO STRIKE AND DISREGARD BRIEFS
FILED BY DEFENDANTS ON JANUARY 17, 1938—Filed Jan-
uary 18, 1938

Come the Complainants and move the Court for the reasons stated in the affidavit of William H. Bemis, attached hereto, and made a part hereof, to strike and disregard the three briefs entitled respectively, "Explanatory Comments on Defendants' Requested Findings of Fact", "Explanatory Comments on Complainants' Requested Findings of Fact" and "Supplemental Brief Responsive to Questions of the Court During Closing Argument", which were filed by Defendants on January 17, 1938, or in the alternative, that Complainants be given a reasonable length of time within which to prepare and file reply briefs.

Trabue, Hume and Armistead, Frantz, McConnell &
Seymour, Baker, Hostetler, Sidlo & Patterson.
(S.) Baker, Hostetler, Sidlo & Patterson, Solicitors
for Complainants.

[fol. 442] AFFIDAVIT IN SUPPORT OF MOTION TO STRIKE AND
DISREGARD BRIEFS FILED BY DEFENDANTS ON JANUARY 17,
1938

In the course of the trial of this cause the Court has repeatedly advised Counsel that argument would follow immediately upon the conclusion of the taking of testimony, that all briefs to be filed by either side must be filed with the Court at the time of the argument, that the Court desired both parties to prepare suggested findings of fact supported

by references to the record, and that such suggested findings must also be submitted at the conclusion of the case.

In discussing these matters with the Court, counsel for Complainants have requested and Counsel for the Defendants have vigorously opposed an allowance of time for preparation of oral argument and findings of fact and an allowance of a reasonable time for the preparation and submission of written briefs.

As appears from the record the taking of testimony in this case was concluded at three forty-five o'clock on January 14. The Court convened at 9 o'clock January 15 to hear oral argument. At the conclusion of the argument briefs on both sides were presented and the Court announced that the case was submitted. On the same day both parties filed their proposed findings of fact, the understanding being that such findings might be supplemented on or before January 17.

During the day on January 17 the Defendants filed with the Court certain papers without submission to Counsel for Complainants. During the evening of the same day Counsel for Complainants submitted to each member of the Court and to opposing Counsel, supplemental findings of fact. The papers previously delivered to the Court by Defendants' Counsel were then for the first time delivered to Complainant's Counsel and it was not until after ten o'clock P. M. January 17 (yesterday) that Complainants' Counsel learned of the facts which are the basis of the within motion.

A cursory examination of the papers filed by Defendants discloses that Defendants have filed as purported "explanatory comments", a 72 page fact brief dealing with Complainants requested findings of fact, a 56 page fact brief dealing with Defendants requested findings of fact, and in addition an 18 page supplemental brief on the law.

Since submission of this cause, in reliance upon the announcements made by the Court herein referred to, most of the Counsel, technical and other advisers of the Complainants have returned home.

W. H. Bemis.

Duly sworn to by Wm. H. Bemis. Jurat omitted in printing.

[fol. 443] IN UNITED STATES DISTRICT COURT

(Caption omitted)

COMPLAINANTS' SUGGESTED FINDINGS OF FACT—Filed January 19, 1938

In accordance with Equity Rule 70½, the Court in deciding the above suit in equity, finds the facts as set out herein:

I

(1) Complainants are eighteen privately owned public utility corporations duly qualified to engage as public utilities in the States of Tennessee, Georgia, Mississippi, Alabama, Kentucky, North Carolina, South Carolina, Virginia and West Virginia, and are engaged principally in the business of generating, transmitting and distributing and selling electricity, or distributing and selling electricity, or transmitting and selling electricity as public utilities in said States (Complainants' Ex. 2).

[fol. 444] (2) The defendant, Tennessee Valley Authority, is a body corporate created by an Act of Congress approved May 18, 1933, and has an office in Knoxville, Knox County, Tennessee.

(3) The defendants, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal are severally residents of Knox County, Tennessee, and are the three chief executive officers and constitute the Board of Directors of the Tennessee Valley Authority.

(4) This is an action of a civil nature, in equity, originally filed in the Chancery Court of Knox County, Tennessee, and thereafter duly removed by the defendants to this Court.

(5) This is a suit in equity and involves questions arising under the Constitution and laws of the United States and the amount in controversy exceeds, exclusive of interest and costs, the sum or value of \$3,000.00.

[fol. 445]

II

(6) The Tennessee Electric Power Company is a public utility corporation organized under the laws of the State of Maryland, is duly qualified to carry on its business as

a public utility in the States of Tennessee and Georgia, and has its principal place of business in the City of Chattanooga, Tennessee (Complainants' Ex. 2). For more than twenty years said Company and its predecessors have been engaged in the electric power business * (166, et seq.) and today it is distributing electricity in 66 counties in Tennessee, 4 counties in Georgia, and 455 communities in Tennessee and Georgia, including the Cities of Chattanooga and Nashville, Tennessee (151-2 and Complainants' Ex. 10). All of the operating territory of the Company, with the exception of a small area North of Nashville, Tennessee, is located within a 100 miles radius of one or more TVA generating plants constructed, under construction or authorized to be constructed (152). Said Company owns and operates 1559 miles of transmission lines and 5226 miles of distribution lines of which 2677 are classified as rural distribution lines (1921, 1340, 1343, and 1364), in said States of Tennessee and Georgia (Complainants' Exs. 10 and 7). It owns generating facilities with a total installed capacity of 244,009 kilowatts and leases generating facilities with a total installed capacity of 6500 kilowatts (Complainants' [fol. 446] Ex. 8). In addition to these facilities the Company is preparing to begin construction of a steam generating plant at Bordeaux, Tennessee, with an initial installed capacity of 25,000 kilowatts and provision for future increase to 150,000 kilowatts. The Company's steam plant at Hale's Bar was constructed to provide for expansion of its present capacity of 40,000 kilowatts to an ultimate capacity of 100,000 kilowatts (161). Said Company also owns hydro sites capable of producing when developed 76,000 kilowatts (161-2) and has interconnections with other utilities, the total capacity of the interconnections being 160,000 KVA (Complainants' Ex. 9). Said Company also owns and operates transportation systems in the Cities of Chattanooga and Nashville, Tennessee; water systems in eleven municipalities; ice plants in seven municipalities; and a telephone system in one municipality (162). For a period of years these businesses have been operated under the same management with the electric operations and as one business, and the severance of one from the other would have an adverse affect upon the Company (163-4).

* Figures in parenthesis not referring to exhibit numbers refer to record pages.

In the year ending September 30, 1937, the Company served 136,470 customers, of which 38,399 were classified as [fol. 447] rural customers (1197), and exclusive of sales to other utilities, sold 767,646,665 KWH, of which 496,923,761 KWH, or 64.7%, represented sales to industrial customers (Complainants' Ex. 10). The Company has issued and outstanding \$49,313,300 in bonds; 241,296 shares of \$100.00 par value preferred stock, and 425,000 shares of no par common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee (164), and it has 3500 employees (173).

(7) Franklin Power & Light Company is a public utility corporation organized under the laws of the State of Tennessee, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the City of Franklin, Tennessee (Complainants' Ex. 2). Ever since the organization of the company in 1929 it has been engaged in the electric power business, distributing electricity in and around the City of Franklin, Tennessee (278, 279). Its operating territory lies approximately 80 miles from Wilson Dam (279). The company owns and operates a distribution system consisting of 15 miles of line (281). It also owns a steam generating plant with an installed capacity of 1,800 kw. which is maintained as a standby plant for The Tennessee Electric Power Company, from which company the Franklin Power & Light Company purchases its power requirements (280, 281). In the year 1936 the company served 901 customers and sold a total of 3,219,758 kwh. (Complainants' Ex. 23). Said company has [fol. 448] issued and outstanding \$100,000 in bonds and 1,900 shares of \$100 par value stock, all of which were issued with the approval of the Railroad & Public Utilities Commission of Tennessee (281 and 282 Complainants' Exhibit- 21 and 22).

(8) Memphis Power & Light Company is a public utility corporation organized under the laws of the State of New Jersey, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the City of Memphis, Tennessee (Complainants' Ex. 2). For more than twenty years, said Company and its predecessors have been engaged in the electric power business (328) and it is now distributing electricity in Shelby County, Tennessee, and in thirty-seven towns and

communities therein, including the City of Memphis (Complainants' Ex. 37; 329). The operating territory of the Company is from 74 to 105 miles from Pickwick Dam (330). Said Company owns and operates 319 miles of transmission lines and 905 miles of distribution lines (Complainants' Ex. 38). It owns a steam generating plant with an installed capacity of 54,000 kilowatts (324); has interchange facilities with Arkansas Power & Light Company and Mississippi Power & Light Company (325), and owns a site for the erection of additional generating facilities with an installed capacity of from 20,000 to 30,000 kilowatts (325). It owns and operates a natural gas distribution system throughout its territory from which approximately 37% of the total gross revenues of the Company are derived (326). The gas and electric properties are jointly operated under the same management and a loss of all or a substantial part of its electric business would increase the cost of operating the gas department (326). In the year ending July 30, 1937, the Company served 56,952 customers, and exclusive of sales to other utilities, sold 191,888,000 kilowatt hours, of which 61,841,000 kilowatt hours, or 32.23% represented sales to industrial customers (Complainants' Ex. 38). The Company has issued and outstanding \$22,275,000 in bonds; 30,000 shares of no par value \$7.00 preferred stock; 32,000 shares of no part value \$6.00 preferred stock, and 7200 shares of no par common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee (327).

(9) The Southern Tennessee Power Company is a public utility corporation organized under the laws of the State of Delaware, is duly qualified to carry on its business as a public utility in the States of Alabama and Tennessee, and has its principal place of business in the City of Chattanooga, Tennessee (Complainants' Ex. 2). The company owns and operates a high tension transmission line from Wilson Dam, Alabama, to Iron City, Tennessee, a distance of approximately 15 miles, and is engaged in the business of transmitting electric energy over said transmission line which constitutes a connection between the Alabama Power Company and The Tennessee Electric Power Company (529,530). The company has outstanding a note amounting to \$380,000 and ten shares of no par stock (530).

(10) Birmingham Electric Company is a public utility [fol. 450] corporation organized as such under the laws of the State of Alabama and has its principal place of business in the City of Birmingham, Alabama (Complainants' Ex. 2). For many years, said Company and its predecessors have been engaged in the electric power business (318-9), and it is now distributing electricity in the City of Birmingham, Alabama, and the metropolitan district thereof, including the Towns of Bessemer, Jonesboro, Brighton, Lipscomb, Fairfield, Irondale, Homewood and Tarrant City, as well as in Jefferson County, Alabama (Complainants' Ex. 33), all of which territory was set aside to it by order of the Alabama Public Service Commission (Complainants' Ex. 34). The Company's operating territory is located approximately 66 miles from Guntersville Dam (311). Said Company owns and operates 1057.52 miles of distribution pole lines (Complainants' Ex. 35). It purchases at wholesale from the Alabama Power Company the electricity which it distributes (312, 314) and owns a steam generating plant with an installed capacity of 11,300 kilowatts which is used as a standby station (314). It also owns and operates a transportation system throughout its territory which contributes about 33% of the total gross revenues of the Company, and a steam heating system serving a substantial portion of the business district of the City of Birmingham which contributes approximately 1% of the Company's total gross revenues (314-15). These several businesses have for a period of years been jointly operated (315). The [fol. 451] Company served 68,110 customers, and in 1936, exclusive of interdepartmental sales, sold 208,113,400 kilowatt hours, of which 116,429,366 kilowatt hours, or approximately 56% of its total sales represented sales to industrial customers (Complainants' Ex. 35).

(11) The Mississippi Power Company is a public utility corporation organized under the laws of the State of Maine, is duly qualified to carry on its business as a public utility in the State of Mississippi, and has its principal place of business in the City of Gulfport, Mississippi (Complainants' Ex. 2). For more than twelve years said company and its predecessors have been engaged in the electric power business, (236 and 237) and today it is distributing electricity in 34 counties and in 147 towns and communities in the State of Mississippi (Complainants' Exs. 12 and 15).

Most of the operating territory of the company is located within 250 miles from Pickwick and Guntersville dams, and much of the operating territory lies within 100 and 150 miles from said TVA generating plants (Complainants' Ex. 12). Said Company owns and operates 857.41 pole miles of transmission lines and 1,080.5 pole miles of distribution lines (Complainants' Ex. 15). It owns generating facilities with a total installed capacity of 18,702 kw. and it has subject to lease or contract generating facilities with an installed capacity of 6,450 kw. (Complainants' Ex. 13). The company, however, purchases substantially all its power requirements from the Alabama Power Company (235) at four interchange points having a combined capacity of 66,300 kw. (232). As a part of its business the company owns and operates a transportation system in the City of Hattiesburg, Mississippi, (235), the total gross revenues from which in the year 1936 were less than 1% of the total revenue received by the company from all sources (236). In 1936 the company within a 100 mile radius of Pickwick Dam, served 1,247 customers, sold 2,102,086 kwh. and derived a revenue therefrom of \$88,254.39; within a 150 mile radius of said dam it served 6,068 customers, sold 14,816,009 kwh. and derived a revenue therefrom of \$484,839.85; within a 250 mile radius of said dam it served 20,772 customers, sold 87,936,552 kwh. and derived a revenue therefrom of \$1,768,553.86 (Complainants' Ex. 16). The total kwh. sales to regular customers in that year amounted to 121,160,760 kwh. of which 64,216,059 kwh. or 53% represented sales to industrial customers (Complainants' Ex. 15). The company has issued and outstanding \$10,690,500 in first mortgage bonds, 39,092 shares of preferred stock and 450,000 shares of common stock (236), and it has 512 employees (242).

(12) The Appalachian Electric Power Company is a public utility corporation organized under the laws of the State of Virginia, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee, and West Virginia, and has its principal place of business in the City of Roanoke, Virginia (Complainants' Ex. 2). [fol. 453] Said company is engaged in the electric power business and distributes electricity in 29 counties in Virginia, 20 counties in West Virginia and 522 towns and communities in Virginia and West Virginia (Complainants'

Ex. 3, 49 and 61). Most of the operating territory of the company is located within 250 miles of Norris Dam; much of its territory is located within 150 miles of said dam, and some of its territory is located within 100 miles of said dam (Complainants' Ex. 49). Said company owns and operates 1,767.88 pole miles of transmission lines, 4,663.79 pole miles of distribution lines (Complainants' Ex. 58), of which 2,527 miles are classified as rural lines (414-415), and in addition, on August 31, 1937, had 452 miles of rural lines under construction (414-415). The company owns generating facilities with a total installed capacity of 381,390 kw., and has a purchased capacity of 43,500 kw. (Complainants' Ex. 50). In 1936 within a 100 mile radius of Norris Dam the company served 439 customers, sold 337,500 kwh., and derived a revenue therefrom of \$16,236; within a 150 mile radius of said dam it served 8,171 customers, sold 69,263,102 kwh. and derived a revenue therefrom of \$1,312,443; within a 250 mile radius of said dam it served 126,700 customers, sold 1,283,307,996 kwh. and derived a revenue therefrom of \$17,690,540 (Complainants' Ex. 55). The total kilowatt hour sales to regular customers in that year amount to 1,351,653,286 kwh., of which -,153,567,845 [fol. 454] kwh., or 85.34% represented sales to industrial customers (Complainants' Ex. 55). The company has issued and outstanding \$80,774,000 in bonds, and preferred and common stocks aggregating \$53,500,167.27 (399) and has 3366 employees (407).

(13). Carolina Power & Light Company is a public utility corporation organized under the laws of the State of North Carolina, is duly qualified to carry on its business as a public utility in said State and in the State of South Carolina, and has its principal place of business in the City of Raleigh, North Carolina (Complainants' Ex. 2). For more than twenty years, said Company and its predecessors have been engaged in the electric power business (357 and 373). It is now distributing electricity in the States of North and South Carolina and 272 incorporated towns and communities therein (Complainants' Exs. 41 and 47). A portion of the Company's operating territory is located within a radius of 100 miles of Norris and Fowler Bend Dams and Fontana dam site; a part of its territory is located within a radius of 150 miles of Fowler Bend Dam and Fontana dam site, and a part of it is located within a radius of 250 miles of

Fowler Bend Dam and Fontana dam site (Complainants' Ex. 45; 366, 367). Said Company owns and operates 1256 pole miles of transmission lines and 5921 pole miles of distribution lines (Complainants' Ex. 47). It owns generating facilities with a total installed capacity of 249,050 kilowatts (Complainants' Ex. 42) which are capable of being enlarged so as to produce an additional 80,000 kilowatts [fol. 455] (364). It owns a hydro site capable of producing when developed 40,000 kilowatts (364) and has interconnections with other utilities, the total capacity of such interconnections being 384,000 kilowatts (374-6). As a part of its business, the Company owns and operates transportation systems in Raleigh and Asheville (364-5), the gross revenues from which are less than 4% of the total gross revenues of the Company (365). In 1936, the Company served 83,836 customers (Complainants' Ex. 47), and exclusive of sales to other utilities, sold 536,521,801 kilowatt hours (Complainants' Ex. 46). In said year, the Company, within a radius of 100 miles from Norris and Fowler Bend dams and Fontana dam site, sold, exclusive of sales to other utilities, 115,802,557 kilowatt hours, of which 83,553,403, or approximately 61%, represented sales to industrial customers (Complainants' Ex. 46; 367); within a 150 mile radius of Fowler Bend Dam and Fontana dam site, it sold, exclusive of sales to other utilities, 118,167,621 kilowatt hours, of which 85,530,602 kilowatt hours, or approximately 72%, represented sales to industrial customers (Complainants' Ex. 46; 367); and within a 250 mile radius of Fontana Dam site, it sold, exclusive of sales to other utilities, 309,197,905 kilowatt hours (Complainants' Ex. 46). The Company has issued and outstanding \$46,000,000 in bonds; 165,162 shares of no par value preferred stock entitled to \$6.00 and \$7.00 annual dividends, and 2,500,000 shares of no par common stock (365), and had as of August, 1937, 1434 regular employees and 57 temporary employees (377).

(14) Tennessee Public Service Company is a public utility corporation organized under the laws of the state of Maine, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the City of Knoxville, Tennessee (Complainants' Ex. 2). For many years, said Company and its predecessors have been engaged in the electric power busi-

ness (296) and it is now distributing electricity in Knox, Jefferson, Cocke, Sevier, Union and Grainger Counties, Tennessee, and 37 towns and communities therein, including the City of Knoxville (Complainants' Exs. 27 and 28; [fol. 457] 296-7). The entire operating territory of the Company is located within a distance of from 25 to 75 miles of Norris Dam (293). Said Company owns and operates 180.58 miles of transmission lines and 1063.77 miles of distribution lines (Complainants' Ex. 28). It purchases practically all of its power requirements from the complainant, Carolina Power & Light Company, and also owns generating facilities with an installed capacity of 3150 kilowatts (294). Said Company also owns and operates a transportation system in the City of Knoxville, Tennessee, which contributes approximately 21½% of the Company's total gross revenues (295). Both the transportation and electric properties are operated under the same management and as one business (295). In the year ending September 30, 1937, the Company served 30,074 electric customers (294), and exclusive of interdepartmental sales and sales to other utilities, sold 131,404,000 kilowatt hours, of which 73,269,000 kilowatt hours, or 55.76%, represented sales to industrial customers (Complainants' Ex. 28). The Company has issued and outstanding \$7,780,000 in bonds; 50,000 shares of no par preferred stock entitled to a \$6.00 annual cumulative dividend per share, and 1,000,000 shares of common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee (295-6).

(15) Holston River Electric Company is a public utility corporation organized as such under the laws of the State of Tennessee with its principal place of business in the City [fol. 458] of Knoxville, Tennessee (Complainants' Ex. 2). Said Company is distributing electricity in the incorporated Town of Rogersville, Tennessee, and eight communities in Hawkins and Hamblen Counties, Tennessee, and to rural customers in said counties (Complainants' Exs. 29 and 30). The entire operating territory of the Company is located within 75 miles of Norris Dam (305). Said Company owns and operates 98.54 miles of distribution lines (Complainants' Ex. 30) and purchases at wholesale power which it distributes from the complainant, Tennessee Public

Service Company (306). For the year ending September 30, 1937, the Company sold 1,560,000 kilowatt hours.

(16) The Alabama Power Company is a public utility corporation organized under the laws of the State of Alabama, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the City of Attalla, Alabama (Complainants' Ex. 2). The company is engaged in the electric power business and distributes electricity in 65 of the 67 counties of the State of Alabama (Complainants' Ex. 89) and in 594 communities in the same State (Complainants' Ex. 96). Practically all of the operating territory of the company is located within 250 miles of Guntersville and Wilson Dams; most of the operating territory is located within 150 miles of said dams; and much of the territory is located within 100 miles of said dams (Complainants' Ex. 89). Said company owns and [fol. 459] operates 3,435 circuit miles of transmission lines, 2,810 miles of distribution lines within incorporated municipalities and 4,519 miles of line classified as rural (Complainants' Ex. 96). It owns generating facilities with a total installed capacity of 571,744 kw. (Complainants' Ex. 90) and has made provision for the expansion of its existing plants such that their capacities may be increased by 321,500 kw. (564, 565).

In 1936, exclusive of sales to the Birmingham Electric Company, the company sold within a 100 mile radius of TVA dams constructed or under construction 711,835,625 kilowatt hours and derived a revenue therefrom of \$7,384,969.48; within a 150 mile radius of said dams it sold 961,472,018 kilowatt hours and derived a revenue therefrom of \$11,147,768.38; and within a 250 mile radius of said dams it sold 1,018,109,064 kilowatt hours and derived a revenue therefrom of \$12,346,658.72 (Complainants' Ex. 95). In that year the total kilowatt hour sales, exclusive of sales to utilities, amounted to 1,145,267,755 kilowatt hours, of which 948,565,825 or 82.8% represented sales to industrial customers (Complainants' Ex. 96). The total number of customers served in that year was 123,739 (Complainants' Ex. 96). The company has issued and outstanding \$96,771,600 in bonds, 367,178 shares of \$5.00, \$6.00 and \$7.00 preferred stock at a stated value of \$35,751,258 and 3,775,000 shares of common stock at a stated value of \$48,961,300 all

of which securities issued subsequent to the creation of the Alabama Public Service Commission were issued with its [fol. 460] approval (567), and it has 2,850 employees (575).

(17) The Kentucky and West Virginia Power Company, Inc. is a public utility corporation organized under the laws of the state of Kentucky, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the City of Ashland, Kentucky (Complainants' Ex. 2). Said company is engaged in the electric power business and distributes electricity in 14 counties and in 100 towns and communities in the State of Kentucky (Complainants' Exs. 49 and 62). All of the operating territory of the company is located within 250 miles of Norris Dam; most of its territory is located within 150 miles of said dam and some of its territory is located within 100 miles of said dam (Complainants' Ex. 49). Said company owns and operates 435.53 pole miles of transmission lines, 553.01 pole miles of distribution lines (Complainants' Ex. 59) of which 131 miles are classified as rural distribution lines, (414-415) and in addition, on August 31, 1937, had 31 miles of rural distribution lines under construction (414-415). The Company owns generating facilities with a total installed capacity of 19,500 kw. (Complainants' Ex. 51). In 1936, within a 100 mile radius of Norris Dam the Company served 3,713 customers, sold 30,078,589 kwh. and derived a revenue therefrom of \$685,969; within a 150 mile radius of said dam it served 9,919 customers, sold 87,946,055 kwh. and [fol. 461] and derived a revenue therefrom of \$1,700,159; within a 250 mile radius of said dam it served 21,170 customers, sold 254,600,861 kwh. and derived a revenue therefrom of \$3,314,345. The total kwh. sales to regular customers in that year amounted to 254,600,861, of which 232,243,229 kwh. or 91.32% represented sales to industrial customers (Complainants' Ex. 56). The company has issued and outstanding \$8,499,000 in bonds and preferred and common stock aggregating \$4,147,525 (399), and has 435 employees (407).

(18) The Kingsport Utilities, Incorporated, is a public utility corporation organized under the laws of the State of Virginia, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the City of Kingsport, Tennessee (Complainants' Ex. 2). The company is engaged in the electric

power business and is distributing electricity in the counties of Sullivan and Hawkins in the State of Tennessee (Complainants' Ex. 49). All of the operating territory of the company is located within a 100 mile radius of Norris Dam (Complainants' Ex. 49). Said company owns and operates 5.75 pole miles of transmission line, 133.53 pole miles of distribution lines (Complainants' Ex. 60), of which 49 miles are classified as rural distribution lines (414, 415), and in addition, on August 31, 1937, had 6 miles of rural distribution lines under construction (414, 415). It also owns generating facilities with a total installed capacity of 11,400 [fol. 462] kw. (Complainants' Ex. 52). In the year 1936 the company served 4,358 regular customers and sold 37,468,385 kilowatt hours, of which 30,356,870 kilowatt hours, or 81% represented sales to industrial customers (Complainants' Ex. 57). The company has issued and outstanding \$1,044,000 in bonds and \$1,000,000 of preferred and common stocks (399) and has 98 employees (407).

(19) The Kentucky-Tennessee Light & Power Company is a public utility corporation organized under the laws of the State of Kentucky, is duly qualified to carry on its business as a public utility in said state and in the State of Tennessee, and has its principal place of business in the City of Bowling Green, Kentucky (Complainants' Ex. 2). The company is engaged in the electric power business and distributes electricity in many counties in Tennessee and Kentucky (Complainants' Ex. 3 and 327). All of the operating territory of the company is within a 250 mile radius, and most of the operating territory is within a 100 mile radius of one or more TVA generating plants constructed, under construction or authorized to be constructed (Complainants' Ex. 327). Said company owns and operates many miles of transmission and distribution lines in the States of Tennessee and Kentucky (Complainants' Exs. 205 and 327).

(20) West Tennessee Power & Light Company is a public utility corporation organized under the laws of the State of Florida, is duly qualified to carry on its business as a [fol. 463] public utility in the State of Tennessee, and has its principal place of business in the City of Jackson, Tennessee (Complainants' Ex. 2). For more than thirty years, said Company and its predecessors have been engaged in the electric power business (468) and it is now distributing electricity in nine counties in West Tennessee and twenty-

four incorporated towns and communities, including the City of Jackson, Tennessee (Complainants' Ex. 74). All of the operating territory of the Company is from 40 to 75 miles of Pickwick Dam (Complainants' Ex. 327). Said Company owns and operates 90.6 miles of transmission lines and 193.6 miles of lines classified as rural (1401). It owns generating facilities with a total installed capacity of 5228 kilowatts (Complainants' Ex. 75) and also has interconnections with Memphis Power & Light Company, from whom it purchases power at wholesale (467). It owns and operates natural gas distribution systems in six municipalities; ice plants in two municipalities; water works systems in three municipalities, and a transportation system in the City of Jackson, Tennessee (467). For a period of years, these businesses have been operated under the same management with the electric operations and as one business and are closely intermingled (467-8). For the year ending July 31, 1937, the Company served 10,050 customers, and exclusive of interdepartmental sales, sold 19,322,248 kilowatt hours, of which 8,080,659 kilowatt hours, or 38.74% represented sales to industrial customers (Complainants' Ex. 76).

[fol. 464] (21) Mississippi Power & Light Company is a public utility corporation organized under the laws of the State of Florida, is duly qualified to carry on its business as a public utility in the State of Mississippi, and has its principal place of business in the City of Jackson, Mississippi (Complainants' Ex. 2). For many years, said Company has been engaged in the electric power business (659) and at present is distributing electricity in 40 counties in Mississippi and 312 incorporated towns and communities therein, including the Cities of Vicksburg, Natchez, Jackson and Greeneville (Complainants' Exs. 101 and 104). Most of the operating territory of the Company is located within 250 miles from Pickwick Dam and a substantial portion of its operating territory is within 150 miles of Wheeler and Guntersville Dams (Complainants' Ex. 101; 652-3). Said Company owns and operates 456.8 miles of transmission lines and 2628.2 miles of distribution lines (Complainants' Ex. 104). The Company purchases substantially all of its power requirements from the Louisiana Power & Light Company (655), and also owns generating facilities with an installed capacity of 19,146 kilowatts (Complain-

ants' Ex. 103). As a part of its business, the Company owns and operates transportation systems in the Cities of Jackson, Greeneville, and Vicksburg; natural gas distribution systems in 24 municipalities; ice manufacturing systems in 5 municipalities; water systems in 6 municipalities, and leases and operates water systems in 4 municipalities (656-7). The total gross revenues from such operations in [fol. 465] 1936 were 29% of the total gross revenues received by the Company from all sources (657). All properties of the Company are operated together as a unit, and the destruction of the whole or a substantial part of its electric business would seriously hamper the Company's ability to efficiently operate its other properties (658). In 1936, the Company, within a 150 mile radius of Pickwick Dam, served 7779 customers; sold 18,734,247 kilowatt hours, and derived revenue therefrom of \$743,744.92; within a 250 mile radius of said dam, it served 29,454 customers, sold 117,792,338 kilowatt hours, and derived revenue therefrom of \$3,063,194.36 (Complainants' Ex. 102). The total kilowatt hour sales to regular customers in that year amounted to 157,608,000 kilowatt hours, of which 87,673,000 kilowatt hours, or 55.6%, represented sales to industrial customers (Complainants' Ex. 104). The Company has issued and outstanding \$16,000,000 in bonds; 69,000 shares of no par value first preferred stock entitled to a \$6.00 annual cumulative dividend; 35,000 shares of no par value second preferred stock entitled to a \$6.00 annual cumulative dividend, and 1,000,000 shares of no par common stock (658).

(22) The East Tennessee Light & Power Company is a public utility corporation organized under the laws of the State of Virginia, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee [fol. 466] and North Carolina, and has its principal place of business in the City of Bristol, Tennessee-Virginia (Complainants' Ex. 2). For many years, said Company and its predecessors have been engaged in the electric power business (506) and today it is distributing electricity in Carter, Johnson, Sullivan, Unicoi and Washington Counties, Tennessee; in Scott and Washington Counties, Virginia; in Avery County, North Carolina, and in 32 incorporated towns and communities, including the City of Bristol, Tennessee-Virginia (Complainants' Exs. 82 and 84). All of the operating territory of the Company is within a radius of 135

miles of Norris Dam, the larger part of it being within a radius of 100 to 115 miles of said dam (505). Said Company owns and operates 66.5 miles of transmission lines and 354.4 miles of distribution lines in said States of Tennessee, Virginia and North Carolina (Complainants' Ex. 84). It owns generating facilities with a total installed capacity of 3828 kilowatts (Complainants' Exs. 82 and 83). Said Company also owns a hydro site near Elizabethton, Tennessee (Complainants' Ex. 82; 501) and has interconnections with Appalachian Electric Power Company and Edmondson Electric Company (Complainants' Ex. 82; 501). The Company also owns and operates a gas distribution system in the city of Bristol, Tennessee-Virginia (503), from which operation approximately 10% of the total gross revenue of the Company is derived (503-4). In the year [fol. 467] ending July 31, 1937, the Company served 10,312 customers, of which 1572 were classified as rural customers, and in 1936, sold 22,904,648 kilowatt hours (Complainants' Ex. 84), of which 9,243,729 kilowatt hours, or 40.4%, represented sales to industrial customers (Complainants' Ex. 84; 511). The Company has issued and outstanding \$2,731,000 in bonds; 2635 shares of no par preferred stock entitled to a \$6.00 annual cumulative dividend, and 35,000 shares of no par common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee (505-6) and it has 204 employees (508).

(23) Tennessee Eastern Electric Company is a public utility corporation organized under the laws of the State of Massachusetts, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee and North Carolina, and has its principal place of business in the City of Bristol, Tennessee-Virginia (Complainants' Ex. 2). For many years, said Company and its predecessors have been engaged in the electric power business and at present it is distributing electricity in Carter, Greene, Johnson, Unicoi and Washington Counties, Tennessee, and in 57 towns and communities therein, including the Cities of Johnson City and Greeneville, Tennessee (Complainants' Exs. 82 and 85). The operating territory of the Company is located within a radius of from 50 to 100 miles of Norris Dam (505). Said Company owns and operates 65.7 miles [fol. 468] of transmission lines and 442.7 miles of distribution lines (Complainants' Ex. 85). It owns generating fa-

cilities with a total installed capacity of 19,060 kilowatts (Complainants' Exs. 82 and 83) and has done preliminary work at hydro sites which it owns capable of producing when developed in excess of 51,000 kilowatts (Complainants' Ex. 82; 502), and the capacity of its Watauga steam plant is capable of being enlarged (502-3). In the year ending July 31, 1937, the Company served 8642 customers, of which 2304 were classified as rural customers (Complainants' Ex. 85), and in 1936, exclusive of sales to other utilities, sold 24,548,569 kilowatt hours, of which 11,049,650 kilowatt hours, or 45%, represented sales to industrial customers (Complainants' Ex. 85; 511). The Company has issued and outstanding \$2,669,500 in bonds; 6000 shares of \$100.00 par value preferred stock entitled to an annual \$6.00 cumulative dividend; 5105 shares of no par value preferred stock entitled to a \$7.00 annual cumulative dividend, and 15,000 shares of no par common stock (506), all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee (506), and it has 125 employees (508).

[fol. 469]

III

(24) Installed capacity is not a measure of the dependable capacity available for electric service. In the case of hydro electric plants, the limiting factor is the water available and not the amount of machinery installed. Of the dependable steam and hydro capacity in a low-water year, a reserve is required to take care of various contingencies (2246, 2249, 2287, 2360, 2884, 2888, 2889, 5137, 5150).

[fol. 470]

IV

(25) Complainants, and each of them are subject to a special tax to which taxpayers generally are not subject, the tax being upon electrical energy sold for domestic and commercial consumption in an amount equal to 3% of the price for which Complainants' sell the same which is imposed by Section 616 of the Federal Revenue Act of 1932, as amended. Complainants also severally pay large sums of money in the form of general taxes to the Federal Government including Social Security taxes and taxes for unemployment relief imposed by Sections 211 to 219 inclusive of the National Industrial Recovery Act. Complainants severally are subject to and pay special and general taxes levied

upon privately owned utilities by the several States and their political subdivisions in which Complainants severally carry on business or own property.

Following is a table of the taxes paid by each of the Complainant Companies, with the exception of Kentucky-Tennessee Light & Power Company, for the year 1936 with an estimate of the taxes to be paid by each company for the year 1937. The taxes paid by Complainants for the year 1936, exclusive of Kentucky-Tennessee Light & Power Company, averaged in excess of 12.7% of Complainants' gross revenue and for the year 1937, exclusive of Kentucky-Tennessee Light & Power Company, it is estimated that such taxes will be in excess of 14.4% of the total gross revenues [fol. 471] of the companies (Complainants' Exs. 6, 17, 20, 24, 31, 36, 40, 48, 67, 68, 73, 80, 81, 86, 97, and 100).

[fol. 472]

Name of Company	1936	1937 (Est.)
The Tennessee Electric Power Company...	\$2,278,880.60	\$2,613,895.00
Franklin Power & Light Company.....	5,681.77
Memphis Power & Light Company.....	1,071,794.82	1,321,527.00
Southern Tennessee Power Company.....	5,896.77	5,953.00
Birmingham Electric Company.....	828,953.47	1,009,329.00
Mississippi Power Company.....	396,286.26	437,891.00
Appalachian Electric Power Company.....	2,817,013.07	3,069,047.97
Carolina Power & Light Company.....	1,607,877.58	2,035,440.00
Tennessee Public Service Company.....	471,335.33	590,733.00
Holston River Electric Company.....	5,414.47	5,611.00
Alabama Power Company.....	2,380,556.45	3,126,400.50
Kentucky & West Virginia Power Company, Inc.....	344,104.06	350,919.03
Kingsport Utilities, Incorporated.....	59,697.46	85,437.89
West Tennessee Power & Light Company..	119,670.44	140,122.88
Mississippi Power & Light Company.....	738,463.61	918,832.00
East Tennessee Light & Power Company...	87,431.38	105,687.57
Tennessee Eastern Electric Company.....	130,419.90	190,390.40
	<hr/>	<hr/>
	\$13,349,477.44	\$16,007,217.24

[fol. 473]

V

(26) The rates and services of each of the Complainant Companies in the States of Alabama, Tennessee, Kentucky, Virginia, Georgia, West Virginia, North Carolina and South Carolina are regulated by State Commissions in the respective states (173, 174, 299, 308, 316, 331, 377, 408, 470, 511, 512, 1045). There is no State Commission in Mississippi. The rates and services of the Complainant Companies in that State are regulated by municipalities within their corporate limits (242, 663).

(27) The rates charged by the several Complainant Companies in the States of Alabama, Tennessee, Georgia, Vir-

ginia, North Carolina and South Carolina are uniform for the different classes of service throughout their respective operating territories. As between the Complainant Companies operating within a state, there is no requirement of uniformity of rates (174, 177, 178, 377, 517).

[fol. 474]

VI

(28) The respective complainants have been issued franchises, licenses, or easements by most but not all of the municipalities and by most but not all of the counties in which they respectively operate electric facilities. Said franchises, licenses, or easements vary in original term and in unexpired term from a few months to more than fifty years, and many are unlimited in term. Most of the said franchises, licenses, or easements purport to be non-exclusive. Most of said franchises, licenses, or easements grant rights not limited within the respective municipalities or counties, but some are limited to particular streets or highways or to portions of the respective counties or municipalities. Some of the franchises, licenses, or easements purport to grant the right to construct and occupy the streets and highways with electrical facilities; some of said franchises, licenses, or easements purport to grant, for the purpose of engaging in the business of selling and distributing electricity, the right to occupy the streets and highways; and some of said franchises, licenses or easements purport to grant the right to occupy the streets and highways with electrical facilities and to engage in the business of selling and distributing electricity within the respective municipalities and counties. The validity of one of the municipal franchises, licenses, or easements claimed by complainants is now being contested in a State court by the municipality concerned (Complainants' Ex. 3).

[fol. 475]

VII

(29) The largest hydro electric plant of the Carolina Power and Light Company is the Waterville Plant located in Haywood County, North Carolina on the Big Pigeon River, which was constructed under authority of a license issued to the company by the Federal Power Commission (Complainants' Exs. 43, 44, 42; 344). This plant has an installed capacity of 108,000 kilowatts, which is more than 43% of the Company's total generating capacity (352, Complain-

ants' Ex. 42). The Company's application for this Federal Power Commission license stated that this Plant would be connected to the transmission system of the Company and that the power output generated there would be used in the Company's market in the western portion of North Carolina (345-346).

(30) Four of the six hydro electric generating plants owned and operated by the Alabama Power Company were constructed under authority of Acts of Congress; Lock 12 (Lay Dam) was constructed under authority of a special Act of Congress, approved March 4, 1907, (34 Stat. 1288); Mitchell Dam (Duncan's Riffle), Martin Dam (Cherokee Bluffs) and Jordan Dam (Lock 18) were constructed under licenses granted pursuant to the Federal Water Power Act (41 Stat. 1063); Complainants' Ex. 91). Such dams have a total installed capacity of 332,500 kw. (Complainants' Ex. 90).

The total generation in all plants owned by the Company for the years 1932 to 1936, inclusive, was 7,881,678,312 kilo-[fol. 476] watt hours, of which 7,485,791,438 kilowatt hours or 95 per cent was generated in the hydro electric plants, and 395,706,874 kilowatt hours, or five per cent, generated in steam and other plants (551, 552). The total generation for the five-year period in the hydro electric plants at Lay Dam, Mitchell Dam, Martin Dam, and Jordan Dam was 6,158,950,000 kilowatt hours which was 78.2 per cent of the generation in all plants owned by the Company (552, 553). For this same five-year period, Mitchell Dam supplied 16.2 per cent of the generation in all plants owned by the Company; Martin Dam supplied 17.6 per cent; Jordan Dam 26.4 per cent; and Lay Dam 18 per cent; Mitchell, Martin, and Jordan plants thus supplying a total of 60.2 per cent of such generation (Complainants' Ex. 934).

In the applications to the Federal Power Commission for these licenses it was stated that these projects would be interconnected with the Company's integrated system and would serve the markets in northern, central and other portions of Alabama into which this transmission line system extended. The licenses issued pursuant to these applications required the Company to install certain generating units of specified minimum generating capacities in these projects serving these markets, which generating units were installed by the Company in compliance with the licenses,

and the projects interconnected with the Company's system (Complainants' Exs. 90, 91; 551-565). The licenses for the [fol. 477] construction and operation of the Mitchell Dam and the Jordan Dam projects were issued by the Federal Power Commission on findings of fact that each of the dams was necessary, convenient and best adapted to a comprehensive scheme of development, improvement and utilization of the Coosa River (Complainants' Ex. 91). Both the special act of Congress (34 Stat. 1288), authorizing the construction and operation of the Lock 12 project (Lay Dam), and the licenses granted by the Federal Power Commission, authorizing the construction and operation of the Mitchell Dam (Duncan's Riffle), Jordan Dam (Lock 18), and Martin Dam (Cherokee Bluffs), contained as conditions to the authority granted, requirements that the Company at its own cost should construct certain navigation facilities at those projects and supply electric service for the operation of certain navigation facilities (Complainants' Exs. 91, 92, 93). In the fulfillment of the obligations imposed by these conditions the Company has expended to date several hundred thousand dollars and is obligated in the future to expend an additional substantial sum (Complainants' Ex. 91; 3140, 3141, 3142, 3143).

[fol. 478]

VIII A

(1) Prior to the passage of the Tennessee Valley Authority Act on May 18, 1933, the Congress, by the Rivers and Harbors Act of July 3, 1930 (46 Stat. 918, 927-8) had adopted the recommendation of the Chief of Engineers made to the Congress in House Document 328, 71st Congress, 2d Session, which recommended the improvement of the Tennessee River from its mouth to Knoxville, a distance of some 652 miles, so as to create a 9 ft. navigation channel over that entire distance by means of a series of low dams, each of which was to be constructed with locks 110 ft. by 600 ft. at an estimated cost of approximately \$75,000,000. (This project is hereafter throughout these findings referred to as "the low dam navigation plan".) This was and still is the existing federal navigation project on the Tennessee River and would be integrated with similar 9 ft. developments on the Ohio and Mississippi Rivers, and on other improved tributaries of the Mississippi, such as the Missouri, Illinois

and Kanawha Rivers (Complainants' Ex. 105, pp. 6-7, 97-101, Complainants' Ex. 105-A, 105-B, 106-A, 107-A, Complainants' Ex. 107, pp. 1032-3; Putnam 1974, Watkins 3512, 3471, Barker 4780).

(2) According to the general practice of the Corps of Engineers, the low dam plan for a 9 ft. navigation channel would have an over-depth of two to three feet throughout, except at the intermediate sill of the lock at Wilson Dam already in existence where there is a controlling depth of [fol. 479] 9 ft. (Putnam 1974, Barker 4780, 4847-9, Watkins 3471).

VIII B

(1) The recommendation of the Chief of Engineers, adopted by Congress in the Rivers and Harbors Act of June 3, 1930, contains the provision that a high power dam might be built by private interests, states or municipalities in lieu of any two or more of the low navigation dams which were recommended, so long as the construction of any such high power dams would not lessen the navigable capacity of the waterway, and with the further provision that if any such high power dams should be built before the low navigation dams (which would be rendered unnecessary by the construction of the high dams), then the United States should contribute to the cost of any such high power dam an amount equal to the estimated cost of the low navigation dams.

There are 149 feasible hydro-electric power sites upon the Tennessee River and its tributaries which, at a cost of approximately \$1,200,000,000, could be developed so as to produce approximately 5,000,000 kw. of firm capacity and 25,000,000,000 kw-hrs. of energy annually, half of which would be produced by projects upon the main stream and the remainder by projects upon the tributaries. Prior to the date of the passage of the TVA Act, privately owned power companies or other private interests had acquired or were in the process of acquiring most of the power dam sites upon the main river and private interests had acquired or were acquiring several of the power dam sites upon the [fol. 480] tributaries, but the construction of any such power dam had not been undertaken by any such private interest nor was any such construction immediately in process on May 17, 1933, when the TVA act was passed granting TVA corporate power to construct high dams at any or all of the

149 sites upon the Tennessee River and its tributaries. Immediately upon the organization of the Tennessee Valley Authority, its directors determined to and did thereafter oppose the granting of any licenses by the Federal Power Commission to any privately owned utility interest to construct power dams upon the Tennessee River or any of its tributaries (Complainants' Ex. 105, pp. 2-3, 6-7, 88, 97-101, Complainants' Ex. 105-A, 105-B, 105-C, 105-D, 106-A, 107-A, 701, Complainants' Ex. 107, p. 1032-3, Complainants' Ex. 113, p. 70, Record 1518-24).

VIII C

(1) In the fall of 1933 the TVA assumed the use, control and possession of Wilson Dam and power plant upon the Tennessee River and U. S. Nitrate Plant No. 2 Steam Plant. Wilson Dam and power plant have an installed generating capacity of 184,000 kw. and an ultimate capacity of 444,000 kw. (Defendants' Ex. 153, pp. 919, 971; Defendants' Ex. 154, p. 60; Complainants' Ex. 116, p. 403).

[fol. 481]

VIII D

(1) TVA announced its intention to construct ten dams upon the Tennessee River and its tributaries, in addition to Wilson Dam, in the report to Congress of March 31, 1936, on "The Unified Development of the Tennessee River System", and will have upon completion of the Plan (hereafter referred to as "The Unified Plan"), an initial power installation of 697,000 Kw. and an ultimate power installation of 1,922,000 Kw. with a firm power capacity of 660,000 Kw., and a firm annual energy output of 5,780,000,000 Kw-hrs. and has annually received appropriations from Congress in order to proceed with the construction program more rapidly than would be possible with funds from its earnings or its bonding power (Complainants' Exs. 328 and 116, p. 403, Defendants' Ex. 153, p. 919).

(2) On October 3, 1933, TVA began the construction of Norris Dam and power plant on the Clinch River, a tributary of the Tennessee River, located 79.8 miles above its mouth, and completed such construction in March, 1936, at a total cost of \$36,310,370 and began generating power in July, 1936. The dam is 265 feet high; 1,872 feet in length; has a normal reservoir area of 34,200 acres; a reservoir shore line of 705 miles, and has an installed generating ca-

capacity of 100,800 kilowatts (Complainants' Ex. 116, p. 403, 434-5, 462-4, Defendants' Ex. 153, pp. 971, 919).

(3) On November 30, 1933, TVA began construction of Wheeler Dam and power plant located 15.5 miles above [fol. 482] Wilson Dam on the Tennessee River and construction was completed in November, 1936, at a total cost of \$35,317,964, exclusive of the cost of the lock built by the War Department, at a cost of \$1,939,693. Wheeler Dam began to generate power in November, 1936 (Complainants' Ex. 116, p. 437-8, 462-4). The Corps of Engineers in 1932 proposed to construct this dam with a lift of 15 ft. as an integral part of the low dam navigation plan. (Complainants' Ex. 106, p. 1207.) The estimated cost of said dam in its ultimate stage will be \$42,817,964, exclusive of the lock built by the War Department (Complainants' Ex. 116, p. 403). The dam is 72 feet in height; 6,335 feet in length; has a normal reservoir area of 64,300 acres; a reservoir shore line of 1,063 miles; has an initial installed generating capacity of 128,000 kilowatts, and an ultimate generating capacity of 256,000 kilowatts (Complainants' Ex. 116, pp. 403, 437-8; Defendants' Ex. 153, pp. 919, 971).

(4) In March, 1935, TVA began construction of the Pickwick Landing Dam and power plant located on the Tennessee River 52.7 miles below Wilson Dam and 100 miles east of Memphis, Tennessee, and the construction will be completed in June, 1938, at an initial cost of \$33,199,497 and an estimated ultimate cost of \$42,431,497. The dam will be 110 feet in height; 7,715 feet in length; have a normal reservoir area of 41,600 acres; a reservoir shore line of 496 miles; an initial installed generating capacity of 72,000 kilowatts, and an ultimate generating capacity of 216,000 kilowatts (Complainants' Ex. 116, pp. 403, 440; Defendants' Ex. 153, pp. 919, 948, 973).

[fol. 483] (5) On December 4, 1935, TVA began the construction of Guntersville Dam and power plant located on the Tennessee River above Wheeler Dam, near Guntersville, Alabama, and construction is estimated to be completed in December, 1938, at an estimated initial cost of \$34,123,660 and an estimated ultimate cost of \$38,524,860. The dam will be 89 feet in height; 4,000 feet in length; have a normal reservoir area of 63,300 acres; a reservoir shore

line of 660 miles, with an initial installed generating capacity of 50,000 kilowatts, and an ultimate generating capacity of 100,000 kilowatts (Complainants' Ex. 116, p. 403, 445; Defendants' Ex. 153, pp. 919, 948, 975).

(6) On January 13, 1936, TVA began construction of Chickamauga Dam and power plant on the Tennessee River about six miles upstream from Chattanooga, Tennessee, and it is estimated that construction will be completed in December, 1939, at an initial cost of \$40,435,645 and an estimated ultimate cost of \$45,333,645. The dam will be 104 feet high; 6,025 feet long; have a normal reservoir area of 32,000 acres; a reservoir shore line of 502 miles; an initial installed generating capacity of 50,000 kilowatts and an ultimate generating capacity of 100,000 kilowatts (Complainants' Ex. 116, pp. 403, 447; Defendants' Ex. 153, pp. 919, 948, 976).

(7) On July 15, 1936, TVA began construction of Fowler Bend Dam and power project located on the Hiwassee River in North Carolina about 75.8 miles above the confluence of said river with the Tennessee River, and it is estimated that construction will be completed in October, [fol. 484] 1940, at an initial cost of \$17,296,061 and an estimated ultimate cost of \$22,491,561. The dam will be 292 feet high; 1,250 feet long; have a normal reservoir area of 6,240 acres; 150 miles of reservoir shore line, and an ultimate generating capacity of 80,000 kilowatts (Complainants' Ex. 116, pp. 403, 442; Defendants' Ex. 153, pp. 919, 948, 974).

(8) TVA has announced its intention to construct Watts Bar Dam and power plant on the Tennessee River and Congress has allocated in its appropriations specific funds for preliminary investigation of a site which has been selected and which is located approximately 530 miles above the mouth of said river. Preliminary work has been done and construction is scheduled to begin in the near future. The estimated initial cost of the dam and power plant is \$29,200,000 and the estimated ultimate cost is \$39,800,000. The dam will be 2,900 feet long and have a normal reservoir area of 42,600 acres and will have an ultimate installed generating capacity of 150,000 kilowatts (Complainants' Exs. 328 and 116, p. 403, 413; Defendants' Ex. 153, pp. 919, 948, 921).

(9) TVA has announced its intention to construct Coulter Shoals Dam and power project on the Tennessee River and Congress has allocated in its appropriations specific funds for preliminary investigation of a site which has been tentatively selected approximately thirty miles below Knoxville, at which site some preliminary work has been done. The dam will be 2,070 feet long and will have a normal reservoir area of 11,900 acres and the estimated initial cost of such dam and power plant is \$25,000,000 and [fol. 485] the estimated ultimate cost is \$30,000,000. The ultimate installed generating capacity will be 60,000 kilowatts (Complainants' Exs. 328 and 116, pp. 403, 413; Defendants' Ex. 153, pp. 919, 921, 948).

(10) TVA has announced its intention to construct the Gilbertsville Dam and power plant on the Tennessee River in Kentucky, 22.5 miles above the mouth of said river and Congress has allocated in its appropriations specific funds for preliminary investigation of a site. Preliminary work has been done at the dam site and construction is scheduled to begin within the near future. The dam will be 150 feet in height; 8,300 feet in length, have a normal reservoir area of 160,000 acres, and have an ultimate generating capacity of 192,000 kilowatts. Its estimated initial cost is \$95,000,000 and the estimated ultimate cost is \$112,000,000 (Complainants' Exs. 328 and 116, pp. 403, 412, 413; Defendants' Ex. 153, pp. 919, 948, 977).

(11) TVA has announced its intention to construct Fontana Dam and power project in North Carolina on the Little Tennessee River, a tributary of the Tennessee River, which will be 450 feet high, 1,750 feet long and the estimated initial cost is \$40,000,000 and the estimated ultimate cost is \$51,000,000 with an ultimate power installation of 180,000 kilowatts (Defendants' Ex. 153, pp. 919, 948; Complainants' Ex. 116, p. 403, Complainants' Ex. 328, pp. 24-27, 62, 100-105).

(12) TVA has announced its intention to construct and has scheduled for construction, an increase in the height of [fol. 486] Wilson Dam at an estimated cost of \$500,000. The estimated cost of the completed development is \$57,950,748 (Complainants' Ex. 116, p. 403, Complainants' Ex. 328, p. 25; Defendants' Ex. 153, p. 919).

(13) TVA has announced its intention to increase the height of the Hales Bar Dam, a private dam constructed under Congressional authority by the Chattanooga and Tennessee River Power Company, a predecessor of complainant, The Tennessee Electric Power Company. This increase in height will cost approximately \$4,000,000 (Complainants' Ex. 328, p. 25).

(14) The development of firm power by hydro-electric project is controlled by the amount of power that can be produced by the project both at extreme low water and extreme high water (Kurtz, 2105).

(15) The load factor of a public utility system is the ratio of the average demand for power on that system expressed in kws. to the maximum demand for power on that system, and in the Tennessee basin area is about 60% (Kurtz, 2105, 2107).

(16) At 100% annual load factor the amount of firm power that can be produced by the TVA Unified Plan with regulation by the reservoirs on the tributaries is 660,000 Kw. and the amount of firm energy is 5,780,000,000 kw.-hrs., which is more than five times greater than the amount which would be produced by the TVA dams upon the Tennessee River if the tributary dams of Norris, Fowler Bend and Fontana were not constructed (Kurtz, 2117-18. Complainants' Ex. 328, p. 62; Complainants' Ex. 115, p. 279).

[fol. 487] (17) At 60% annual load factor the firm power produced by the TVA Unified Plan, excluding the U. S. Nitrate Plant No. 2 Steam Plant, would be 1,100,000 kws. and the average annual firm energy would be 5,780,000,000 kw.-hrs. per year. The firm power capacity of all the plants included in the TVA Unified Plan, including U. S. Nitrate Plant No. 2 Steam Plant, at 60% annual load factor would be 1,200,000 kws. and the available firm energy would be 6,307,000,000 kw.-hrs. per year (Kurtz, 2118-19, Complainants' Ex. 328).

(18) At 60% load factor in a low water year the total available energy from the plants included in the TVA Unified Plan, including Wilson Dam, would be 7,667,000,000 kw.-hrs. energy, of which 5,780,000,000 would be firm energy, and 1,887,000,000 kw.-hrs. would be secondary energy available less than 75% of the time (Kurtz, 2119-2120).

(19) The total available energy under the TVA Unified Plan in an average water year would be 10,000,000,000 kw.-hrs. per year and the secondary energy 4,220,000,000 kw.-hrs. per year (Kurtz, 2123).

(20) At 100% load factor, the firm capacity of Wilson Dam, excluding United States Nitrate Steam Plant No. 2, before the capacity of Wilson Dam was increased by the TVA dams upon the Tennessee River and its tributaries, was approximately 28,000 kws. and the firm energy was 242,600,000 kw.-hrs. per year. At 60% load factor 145,600,000 kw.-hrs. per year of firm energy would be produced by Wilson Dam power plant. The operation of the tributary reservoirs [fol. 488] under the TVA high dam program solely for regulation of the river will increase the firm power capacity of Wilson Dam at 60% load factor by 151,300 kilowatts per year and the firm energy by 795,200,000 kw.-hrs. per year (Kurtz, 2124, 2125, Putnam 1913).

(21) At 100% load factor the operation of the tributary reservoirs solely for regulation of the river would increase the firm power capacity of Wilson Dam by 79,700 kilowatts, and the firm energy by 698,200,000 kw.-hrs. per year (Kurtz 2126, Bowman, 3888-90, 3910).

[fol. 489]

VIII E

(1) The navigation channel which will incidentally result on the Tennessee River from the completion of the TVA Unified Plan will have less capacity than the low dam navigation plan for carrying water borne commerce, and the other minor offsetting advantages and disadvantages of the channel incidentally resulting from the execution of the TVA Unified Plan in comparison with the low dam navigation plan recommended by the Chief of Engineers and adopted by the Congress shows no measurable advantage from the standpoint of navigation in favor of the TVA Unified Plan, and the expenditure of no additional sum of money in the interest of navigation could be justified by reason of any superiority of the navigation channel incidentally resulting from the TVA Unified Plan over the navigation channel which would result from the construction of the low dam plan (Putnam, 1923, 1928-9, 1931, 1947, Kelley 2571-2).

(2) The low dam navigation plan could have been constructed for less than \$75,000,000. The estimated cost of the TVA Unified Plan is more than \$473,000,000. The additional expenditure of approximately \$400,000,000 involved in the TVA Unified Plan is not an expenditure for the benefit of navigation, but for some other purpose (Putnam, 1931, Barker 4796, Complainants' Ex. 105, pp. 4-5, 98, 100).

(3) The completion of either the low dam navigation plan recommended by the Chief of Engineers and adopted by Congress or the TVA Unified Plan would result in slack [fol. 490] water navigation over the entire length of the Tennessee River from its mouth to Knoxville. The extreme low water flow of the Tennessee River is far in excess of the needs of navigation on such a slack water system. Any enrichment of the low water flow by reason of releases from tributary reservoirs would be of no benefit to navigation upon the Tennessee River, and their effect, if any, would be unfavorable to navigation (Putnam 1912, 1952; Kelley 2572, Woodward 4061).

(4) Present and prospective benefits from the construction of the low dam navigation plan would not justify its cost, and much less would such benefits justify the cost of the High Dam TVA Plan. The recommendation of the Chief of Engineers, adopted by the Congress in the Rivers and Harbors Act of July 3, 1930, provided for a nine foot low dam navigation channel on the Tennessee River, but contemplated that it should be constructed gradually over a considerable period of years in order that it might reach economic justification (Putnam, 1931, 1947; Complainants' Ex. 105).

(5) Norris and Hiwassee Dams are obstacles, and Fontana Dam will be an obstacle, to through navigation upon the Clinch, Hiwassee and Little Tennessee Rivers, respectively, and will have no value to navigation upon the Tennessee River (Putnam 1952-5).

(6) Under the low dam program there would be incidentally produced 4400 kw. of firm power and about 5600 kw. of secondary power for the operation of the locks. The firm power available at Wilson Dam before the construction of any of the TVA high dams was about 28,000 kw., and under the TVA high dam program there will be produced

660,000 kw. of firm power from all dams, excluding the [fol. 491] Sheffield steam plant (Putnam, 1913, 1923; Complainants' Exs. 105 and 346, Complainants' Ex. 328, p. 62).

(7) There will be no material difference in the benefits to navigation upon the Tennessee River between the low dam plan and the TVA high dam plan, and there would be no difference in pool fluctuations between the low dam navigation plan and the high dam plan at the four principal terminal sites upon the Tennessee River of Florence, Sheffield, Chattanooga and Knoxville. No additional expenditures over and above the cost of the low dam plan for navigation are justified to improve navigation upon the Tennessee River (Putnam 1931; Kelley, 2571-2; Barker 4852-55; Watkins 3491-4).

(8) The TVA Unified Plan for the development of the Tennessee River is not primarily designed to promote navigation upon the Tennessee River and its tributaries (Putnam, 1955-6).

(9) The TVA high dam plan is not integrated with the navigation developments on the Ohio and Mississippi Rivers for the wide waters in the lakes created by the TVA high dams require a different type of transportation equipment from that commonly used upon the Ohio and Mississippi Rivers (Putnam, 1957; Willson, 2628).

(10) When a private power company builds a dam and reservoir upon a navigable stream under a Federal Power Commission license, all such navigation facilities must be approved by the Chief of Engineers, which approval the TVA has also secured in constructing its main stream dams (Barker, 4793).

[fol. 492] (11) If work had been started in 1933, the low dam plan for navigation upon the Tennessee River could now have been completed, for the amount already expended by TVA for the construction of Wheeler and Norris Dams alone (Barker, 4796).

(12) The operation of Norris Dam and the completed Hiwassee Dam will permit the manipulation of the pools of the main river dams for power purposes and permit daily peaking to meet the utility load curve (Barker, 4800-1).

(13) The practical working capacity, which is 20% of the theoretical capacity, of the Tennessee River for navigation under the low dam plan would be:

(a) For through traffic from Knoxville to the Ohio River 5,960,000 tons per year.

(b) Below Florence 31,540,000 tons per year.

(c) From the head of Wilson lake to the Hales Bar Dam 34,280,000 tons per year.

(d) Above Chattanooga 35,840,000 tons per year. (Putnam 1906-1907.)

(14) The practical working capacity, of the Tennessee River for navigation under the high dam plan is limited:

(a) For through traffic from Knoxville to the Ohio River by the capacity of the locks at Wilson Dam to 5,960,000 tons per year.

(b) Below Florence by the capacity of the lock at Pickwick Landing Dam to 26,280,000 tons per year.

[fol. 493] (c) From the head of Wilson lake to the Hales Bar Dam by the capacity of the lock at Wheeler Dam to 9,520,000 tons per year.

(d) Above Chattanooga by the capacity of the lock at Coulter Shoals to 8,900,000 tons per year (Putnam 1918).

(15) The theoretical capacity of the Tennessee River for navigation under the low dam plan would be:

(a) For through traffic from Knoxville to the Ohio River 29,800,000 tons per year.

(b) Below Florence 157,700,000 tons per year.

(c) From the head of Wilson lake to Hales Bar Dam 171,400,000 tons per year.

(d) Above Chattanooga 179,200,000 tons per year (Putnam 1908).

(16) The theoretical capacity of the Tennessee River for navigation under the high dam plan is limited:

(a) For through traffic from Knoxville to the Ohio River by the capacity of the lock at Wilson Dam to 29,800,000 tons per year.

(b) Below Florence by the capacity of the lock Pickwick Landing Dam to 131,400,000 tons per year.

(c) From the head of Wilson lake to Hales Bar Dam by the capacity of the lock at Wheeler Dam to 47,600,000 tons per year.

(d) Above Chattanooga by the capacity of the lock at Coulter Shoals to 44,500,000 tons per year (Putnam 1919).

[fol. 494] (17) The capacity of the Tennessee River for navigation is smaller under the TVA high dam plan than under the low dam plan (Putnam, 1921, 1906-8, 1918-1919).

(18) Under the low dam plan of navigation the movable dams are lowered when river stages are sufficient to provide project depths without dams, making it unnecessary to use the locks for passing navigation. During those periods, which are as great as 67% of the time, depending upon location, the capacity of the waterway is practically unlimited, for which no allowance has been made in calculating the practical working capacity under the low dam plan (Putnam 1909).

(19) Under the low dam plan at extreme low water the greatest flow of water for navigation would be required at the highest lock, which would be at Colbert Shoals at Riverton, and with the lock used at its theoretical maximum capacity at that point, the flow of water necessary for navigation would be 1,360 cu. ft. per second for leakage, evaporation, and operation of the locks. The extreme low water flow of the Tennessee River at Colbert Shoals at Riverton is 4,350 cu. ft. per second (Putnam, 1910-1911).

(20) The estimate of the Corps of Engineers of the United States Army of the cost of the low dam plan at \$74,709,000 is reasonable. The cost of the high dam program, exclusive of the cost of Wilson Dam, as estimated by the Tennessee Valley Authority is \$473,649,650 (Putnam, 1912, 1921, Barker, 4796, Compl. Mants' Exhibit 106, pp. 6-7, 98-99).

[fol. 495] (21) The annual estimated maintenance and operating cost of the low dams exclusive of Wilson Dam,

Dam No. 1 and Hales Bar Dam, would be \$1,580,000. The annual estimated minimum maintenance and operating cost of the Tennessee Valley Authority's high dam program chargeable to navigation alone, exclusive of Hales Bar Dam, is \$994,000 (Putnam, 1913, 1922, Complainants' Exhibit 105, p. 101.)

(22) The Tennessee Valley Authority's Unified Plan for the Development of the Tennessee River includes the construction of seven main river dams and three dams on tributary streams, in addition to Wilson Dam, Dam No. 1 and Hales Bar Dam already in existence. The lift at Gilbertsville Dam will be 68 ft.; at Pickwick Landing Dam 61 ft.; at Wheeler Dam 53 ft.; at Gunter'sville Dam 45 ft.; at Chickamauga Dam 53 ft.; at Watts Bar Dam 71 ft.; and at Coulter Shoals Dam 71 ft. (Putnam, 1915, Complainants' Ex. 328, Defendants' Exhibit 153, p. 919).

(23) Except for Wilson Dam, Dam No. 1, and Hales Bar Dam already in existence, the dams in the TVA high dam program above Wilson Dam will have locks which are 60' x 360', but no provision has been made in the construction of Norris and Hiwassee Dams for the installation of locks or barge lifts, and under the low dam plan all locks would be 110' x 600' (Putnam, 1921, 1953, Barker, 4793, Complainants' Exhibits 328 and 116, pp. 433-447.)

(24) Larger tows can pass through the larger low lift locks of the low dam plan with less loss of time than they can through the smaller locks of much higher lift of the [fol. 496] high dam plan (Putnam, 1921, 5939-41, Barker 4827; Complainants Exs. 932 and 935).

(25) Depths in a navigable stream beyond those depths necessary to eliminate bottom friction are of no value to navigation, and when those depths are excessive, they are a hazard to navigation, making it difficult to ground vessels immediately in case of accident and making salvage operations more difficult or impossible (Putnam, 1927).

(26) The width of inland waterways should be limited as the high waves resulting from winds on excessively wide waterways are a hazard to navigation (Putnam, 1924, Willson, 2625-6).

(27) The TVA pools have sufficient depths for extensive widths to allow winds to create waves of 3 feet and higher (Putnam 5849, 5850, 5858).

(28) The approximate length and maximum width of the pools upon the Tennessee River created by the TVA Unified Plan will be:

Dams	Length of Pool	Maximum Width
Gilbertsville	184.2 miles.	6 miles.
Pickwick Landing	50.1 miles.	1½ miles.
Wheeler	74.1 miles.	3½ miles.
Guntersville	82.1 miles.	3 miles.
Chickamauga	59.9 miles.	2½ miles.
Watts Bar	73.4 miles.	1½ miles.
Coulter Shoals	48.8 miles.	½ mile.

(Defendants' Exhibits 55 to 64.)

[fol. 497] (29) The theoretical efficiency for navigation, as compared with a hypothetical perfect waterway, taking into consideration minimum and maximum widths and depths, maximum curvatures and current velocities, elimination of lockages, adequacy of water supply and circuitry factor, under the low dam plan is 67.4% and under the TVA high dam plan is 70.6% (Putnam, 1923, 1928, 2017).

(30) The theoretical difference between the efficiency of the low dam and the efficiency of the TVA high dam plan has no practical significance to navigation (Putnam, 1929).

(31) Commerce upon the Tennessee River between 1927 and 1934 averaged 1,750,000 tons per year, for which the average haul was 23 miles, which consisted 82% in the transportation of sand and gravel, 9% in the transportation of various forest products, and 9% in the transportation of iron, steel, lime and cement. Since the creation of TVA, government traffic has constituted a substantial portion of the total traffic, amounting to 52% in 1935 and 54% in 1939 of the total traffic. The average annual value of such cargoes was \$11,000,000, on which the average annual savings of water transportation over land transportation was \$2,000,000. There have been no significant or substantial movements of commerce upon the tributaries of the Tennessee River (Putnam, 1931-1939, Barker 4771-2, 4764-8, 4835-7, 4843; Alldredge 5050, Defendants' Ex. 153, pp. 938, 1064).

(32) The justifiable capital expenditures for the improvement of navigation upon the Tennessee River for existing [fol. 498] traffic would be \$28,600,000, of which \$24,600,000

has already been expended for navigation improvements (Putnam, 1940).

(33) The average annual commerce upon the Tennessee River at the end of the 30 year period after the creation of a 9-foot channel is estimated to have increased by 5,000,000 tons, for which the average annual increased transportation savings are estimated at \$3,180,000. For the increased traffic and transportation saving, the justifiable investment in navigation improvements would be between \$35,600,000 and \$48,000,000, depending upon the type of improvement to be made (Putnam, 1945).

(34) The cost of the construction under the low dam program would exceed the justifiable investment for the improvement of navigation upon the Tennessee River for future commerce by \$39,400,000 and the cost of the construction of the TVA high dam program, exclusive of the cost of Wilson Dam, exceeds the justifiable investment for the improvement of navigation for future commerce by \$425,650,000 (Putnam, 1947).

(35) The TVA high dam program will not reduce the average annual flood damage of \$25,150 to navigation upon the Tennessee River because of the compensating elements which are involved (Putnam, 1950-1951).

(36) There is no advantage accruing to navigation upon the Tennessee River by shutting off the flow from Norris Dam entirely on Sundays and Labor Days as was done during August and September, 1936 (Barker 4802-4803, CX 916).

[fol. 499] (37) It would not be practical or feasible to construct a belt coal conveyer to pass coal from barges on the reservoir at Norris Dam to other barges below Norris Dam to be transported upon the Tennessee River (Barker 4804-16, Complainants' Exhibit 933).

[fol. 500]

VIII F

(1) The flood damages to navigation on the Tennessee River are negligible in character (do not exceed \$25,150 annually), and would not be reduced by the TVA Unified Plan in an amount sufficient to justify any capital expenditure (Putnam 1950-1).

(2) The completion of the TVA Unified Plan would not eliminate any measurable amount of flood damages to navigation on the Mississippi River (Kelley 2555, 2569).

(3) No part of the estimated cost of the TVA Unified Plan may be justified as an expenditure for the protection from or elimination of flood damages to navigation on the Tennessee or Mississippi Rivers (Kelley 2555, 2569; Kurtz 2101, 2110, 2114-16).

(4) Practically all of the property damage from floods in the Tennessee Valley occurs at and above Chattanooga, Tennessee (Kurtz 2058, Complainants' Ex. 349, Watkins 3417, 3421; Complainants' Ex. 105, p. 734).

(5) The greatest practicable protection against flood damage to property and injury or death of persons by floods at and above Chattanooga may be achieved by a system of detention reservoirs for flood protection only located on the tributaries of the Tennessee River and costing approximately \$81,000,000. Such a system of detention reservoirs will provide substantially 10 times as much dependable flood control and flood protection at Chattanooga and above as would be achieved by the construction of the TVA Unified Plan (Kurtz 2084-6, 2098; Complainants' Ex. 353 and 355; Bowman 3877-8).

(6) Flood damages in the Tennessee River below Chattanooga are relatively small in amount and, while including some damage to highways and railroads (easily eliminated by relocation), consist largely of damages to farm crops resulting from the overflow of rich valley lands. The construction of the TVA Unified Plan will overflow permanently thousands of acres more of such valley farm land than is now occasionally overflowed by floods. At the present time such occasional overflows generally take place before the crop season and their results are beneficial to the land (Kurtz 2084-6, 2098; Complainants' Ex. 353 and 355; Bowman 3877-8; Complainants' Ex. 105, p. 734, Defendants' Ex. 153, p. 919, 947; Complainants' Ex. 116, p. 403).

(7) The present system of flood protection and flood control on the Mississippi River below Cairo consists of levees, bypasses and channel rectification. This system was originally known as the Jadwin Plan which was adopted by the Congress in 1928 after the great flood of 1927. Since that

time the Jadwin Plan, although not yet completed, has taken care of every flood which has occurred on the lower Mississippi, including the great flood of 1937. Recently General Markham, then Chief of Engineers, recommended certain modifications which included changes in the bypasses and channel rectification which experience had shown was very effective in reducing flood heights within the levees (Kelley 2560-1, 2569).

(8) The construction of the TVA Unified Plan would not avoid the necessity of completing the Jadwin-Markham Plan nor decrease its cost by a single dollar. At most it might in peculiar conditions surrounding a given flood make un-[fol. 502] necessary the use of some of the bypasses. The effect would be uncertain and negligible. The flowage rights in the bypasses or floodways have been, or will be according to the plan, purchased by the government and are in any case flooded only once in 10 or 12 years with relatively small damage (Kelley 2555, 2569).

(9) Evidence in the record and documents, of which the Court may take judicial notice, establish that for a period of over 50 years the Chief of Engineers have held that storage reservoirs on tributary streams are of uncertain, negligible and undependable value for flood protection on the Mississippi and that their value for flood protection, power development and other local uses far exceeds any possible value for flood protection on the Mississippi (Complainants' Ex. 105, p. 3, sec. 12; Defendants' Ex. 32, p. 3, sec. 8).

(10) No substantial part of the estimated cost of the TVA Unified Plan may be properly charged to flood protection on the Mississippi River below Cairo (Kelley, 2555, 2569).

(11) Less than 8% of the total population in towns and cities upon the Tennessee River and its tributaries, which in 1930 was 341,522, is below Chattanooga (Kurtz 2052; Complainants' Ex. 348).

(12) Of the total damage to cities and towns on tributaries of the Tennessee River, both in a very great flood and in the average annual flood, more than 75% occurs on the Emory River, where the estimated average annual damage is \$153,700 and the total annual flood damage to all cities and towns on all tributaries of the Tennessee River, includ-

ing the Emory River, is \$204,435. The TVA Unified Plan makes no provision for the construction of any dam on the Emory River (Kurtz 2058, 2091; Complainants' Ex. 349; [fol. 503] Kimball 4402).

(13) The estimated average annual damage from all floods to cities and towns upon the Tennessee River and its tributaries is \$932,985, of which \$923,685 occurs at and above Chattanooga and \$9,300 occurs below Chattanooga (Complainants' Ex. 349).

(14) The estimated average annual damage from all floods to railways upon the Tennessee River and its tributaries is \$350,118, of which \$343,258 occurs at and above Chattanooga and \$6,860 occurs below Chattanooga (Complainants' Ex. 349).

(15) The estimated average annual damage from all floods to highways is \$158,105, of which \$89,110 occurs at and above Chattanooga and \$68,995 occurs below Chattanooga (Complainants' Ex. 349).

(16) The estimated average annual damage from all floods to all classes of property on the Tennessee River and its tributaries is \$1,441,208, of which \$1,356,053 occurs at and above Chattanooga (Complainants' Exhibit 349, Watkins 3417, 3421).

(17) A flood control program to achieve the maximum practical protection upon the Tennessee River and its tributaries should be directed primarily for protection at and above Chattanooga (Kurtz 2062).

(18) The four largest floods upon the Tennessee River have occurred in March and April. If it were necessary to provide a storage for the generation of a certain amount of firm power by the first of March in each year which encroached upon the flood storage, the dependable flood storage available for the floods in March and April would be reduced (Floyd 4447).

[fol. 504] (19) It is not possible to predict on January 15, February 15, March 15 or April 15 of any year whether the rest of the year will be as dry as 1925 or to predict rainfall; and reservoirs cannot be operated upon hindsight (Kimball 4394; Woodward 4116; Floyd 4446).

(20) A storm which would produce the greatest flood to be anticipated at and above Chattanooga would have a total rainfall of 11 inches over the entire drainage area of 21,400 square miles, except upon the Emory River and the upper reaches of the French Broad River where the total rainfall would be 13 inches, would have a 90% run-off during the storm and would last three days (Kurtz 2062-2068).

(21) The maximum practicable protection against flood damages upon the Tennessee River and its tributaries would be secured by the construction upon all main tributaries of the Tennessee River above Chattanooga of a system of 19 detention reservoirs which would be kept empty or dry except during floods and would be located as follows:

- (a) 4 on the Hiwassee River;
- (b) 4 on the French Broad River and its tributaries;
- (c) 5 on the Holston River and its tributaries;
- (d) 2 on the Little Tennessee River;
- (e) 1 on the Clinch River; and
- (f) 3 on the Emory River and its tributaries (Kurtz 2071, 2073; Complainants' Ex. 352).

(22) The system of 19 detention reservoirs would control 16,713 square miles of the total drainage area above Chattanooga of 21,400 square miles, would generate no power and would achieve no other result except flood control protection, [fol. 505] and would in no way be inconsistent or interfere with the low dam plan for navigation upon the Tennessee River (Kurtz 2067, 2074-5; Complainants' 353).

(23) The system of 19 detention reservoirs would operate so that while the reservoirs are being filled, a constant flow is discharged through the total area of the openings in the dam and when filled, the opening of the lowest reservoir of each of those principal tributary groups would be maintained at constant and fixed rate of discharge so as to keep the discharge below the reservoir as nearly as possible at bank-full stage. The upper reservoirs on each tributary would have their discharge vary within a considerable range so as to suit conditions obtaining for any particular flood. When these reservoirs collect any flood waters, these waters are released just as soon as it is safe to do so from the standpoint of the streams below (Kurtz 2075-7).

(24) The system of 19 detention reservoirs upon the tributaries of the Tennessee River above Chattanooga would give the maximum practicable protection to life and property from large floods (Kurtz 2081-2).

(25) Under the TVA high dam plan only Fontana Dam on the Little Tennessee River, Norris Dam on the Clinch River, and Fowlers' Bend Dam on the Hiwassee River will provide a certain measure of control of flood waters from 25% of the drainage area above Chattanooga, and the three tributary dams, together with Coulter Shoals, Watts Bar and Chickamauga Dams on the main stream will provide only 620,000 acre feet of dependable flood storage for run-off from the 21,400 square miles in the drainage area above Chattanooga and will permanently flood 110,870 acres. All [fol. 506] the dams in the TVA high dam plan will permanently flood at normal pool level 374,840 acres and the Corps of Engineers of the United States Army has estimated that the total land which would be temporarily flooded by a great flood occurring only every 500 years would be 480,000 acres between Knoxville and the mouth of the river. The proposed system of 19 detention reservoirs upon the tributaries of the Tennessee River would have a dependable flood storage volume of 6,263,700 acre feet, would flood no land permanently, would flood 132,285 acres temporarily at the time of the greatest flood and would provide a large measure of effective control over 78% of the drainage area above Chattanooga (Kurtz 2084-6, 2098; Complainants' Ex. 353 and 355; Bowman 3877-8; Complainants' Ex. 116, p. 403, and Ex. 105, p. 734; Defendants' Ex. 153, 919, 947).

(26) The greatest flood to be anticipated upon the Tennessee River and its tributaries would result in a stage at Knoxville of 68.3 feet with a maximum flow of approximately 620,000 second feet; in a stage at Loudon of 71.5 feet, with a maximum flow of approximately 605,000 second feet; in a stage at Chattanooga of 73 feet with a maximum flow of approximately 680,000 second feet. The previous maximum recorded stage was at Knoxville 44.4 feet; at Loudon 47.0 feet; and at Chattanooga, 57.9 feet (Kurtz 2068; Complainants' Exhibit 350).

(27) Under the TVA high dam plan at the time of the greatest flood, if part of the power storage in the TVA high dam reservoirs were drawn down, the peak of the great

flood of Knoxville of 68.3 feet would not be reduced; at Loudon the peak of the great flood would be reduced from 71.5 feet to 66.2 feet; and at Chattanooga the peak would [fol. 507] be reduced from 73 feet to 67.7 feet; and at Harriman on the Emory River, the peak of the great flood of 63.7 feet would not be reduced. Under the proposed system of 19 dry reservoirs, at the time of the greatest flood, the peak at Knoxville would be reduced to 27.1 feet; at Loudon to 33.9 feet; at Chattanooga 53.9 feet; and at Harriman to 39.8 feet (Kurtz 2089-91, Complainants' Ex. 356, 357 and 358).

(28) The estimated reduction of the maximum flood at Chattanooga of 73.0 feet to 53.9 feet by the system of 19 detention reservoirs would be sufficient to render practicable the construction of levees at Chattanooga for local flood protection. The reduction of the maximum stage of 73.0 feet at Chattanooga to 67.7 feet by the TVA Unified Plan is not sufficient to render practicable the construction of levees at Chattanooga for local flood protection (Kurtz 2095).

(29) The TVA Unified Plan gives no protection on the Emory River where 22 persons were drowned in the flood of March, 1929. The system of 19 detention reservoirs would reduce the maximum flood of 63.7 feet at Harriman on the Emory River to 39.8 feet which is below flood stage (Kurtz 2095-6; Complainants' Ex. 356 and 328).

(30) The Chickamauga Dam is completely drowned out, the top of the gates being under seven to nine feet of water, by the maximum flood to be expected at Chattanooga (Complainants' Ex. 359; Kimball 4339-42).

(31) The operation of Wheeler and Wilson reservoirs during the period of the 1937 flood increased the flood peak at Cairo by releasing 7,000 second feet more than flowed into those reservoirs during that period and was typical of how they will be operated (Woodward 4100, 4108; Floyd 4445).

[fol. 508] (32) The operation of Norris Dam in June of 1936, by increasing the low water flow of the Tennessee River and by the generation of power, was sufficient to double the firm power capacity of the TVA system as it existed at that time (Woodward 4136-8; Complainants' Exhibit 909; Complainants' Ex. 116, p. 515).

(33) The estimated cost of the construction of a system of 19 detention reservoirs solely for flood control purposes is \$81,133,600 and the estimated cost of the TVA high dam program, exclusive of Wilson Dam, is \$473,650,000. The average annual maintenance cost of the system of 19 dry reservoirs would be \$400,000 (Kurtz 2099, 2100, 2103).

(34) The amount of power which can be produced by the plants included in the TVA Unified Plan, over and above the firm power capacity of the Wilson power plant as it was originally constructed, is 1,072,000 kw. at a 60% annual load factor. No firm power of any kind would be produced by the construction of the proposed system of 19 dry reservoirs (Kurtz 2107-8; Complainants' Ex. 361).

(35) Under the TVA high dam program the cost of construction of Norris Dam reservoir and the town of Norris upon the Clinch River was approximately \$36,300,000; its dependable flood control storage is 497,000 acre feet; and its dead storage for power purposes is 570,000 acre feet and an additional power storage of 1,500,000 acre feet. Under the proposed system of 19 dry reservoirs, a dam could have been constructed at the site of Norris Dam having a dependable flood control storage of 1,312,000 acre feet, impounding no water permanently for any purposes, and costing \$8,136,000 (Kurtz 2101, 2110, 2114, 2116, Complainants' Ex. 362; Defendants' Ex. 153, pp. 919, 969, 971).

[fol. 509] (36) Dead storage concentrates the fall of a stream as a substitute for a natural fall and is always permanently maintained solely for the creation of head for power purposes with no incidental flood control value. The bottom 135 feet at Norris Dam is dead storage with a capacity of 570,000 acre feet. The power storage behind Norris Dam of 1,500,000 acre feet from elevation 955 to 1020 creates a head and storage for power production in the summer and fall and has no incidental dependable flood control value. The Norris Dam from elevation 1020 to 1034 has a dependable flood control storage of 497,000 acre feet, which storage creates no incidental firm power. The dependable flood storage in the pure flood control dam on the Clinch River costing \$8,136,000 is 2.6 times as much as the dependable flood control storage in the Norris Dam costing \$36,310,000 (Kurtz 2113-2116; Complainants' Ex. 362; Bowman 3878, 3892-3, 3899; Wessenaar 5493).

(37) To increase the flow at Wilson Dam during a dry year from 4,300 second feet to 18,900 second feet, it will be necessary to have 3,200,000 acre feet of storage which could not be retained during March and April of any year in the main stream reservoirs above Wilson Dam without encroaching upon the flood surcharge in those reservoirs and could only be stored in the Norris and Hiwassee reservoir requiring Norris to be maintained at or above elevation 1020 during February, March and April of each year. Early in January, 1937, Norris reservoir was filled to elevation 1010 and remained above that elevation through June, 1937, during which period it reached elevation 1031 and flooded out surrounding highways (Bowman 3882-87); Kimball 4285, 4289-90, 4385, 4392; Woodward 4134, 4160-1).

[fol. 510] (38) Norris Dam, being maintained above elevation 1010 from January to June, 1937, was not operated as a flood control reservoir, since there is nothing in the record to show that it could not have been drawn down to provide flood storage without causing flood damage below.

(39) Since great floods have occurred on headwaters of the Tennessee and nearby rivers during the summer or at any time during the year, the operation of Norris Dam in 1937 was not as a flood control reservoir and the proposed plan of operation of the TVA high dams upon the Tennessee River and its tributaries would not be for flood control but primarily for the purpose of power (Kurtz 2063; Complainants' Ex. 941, 923, 924; Woodward 3136-8; Complainants' Ex. 116, p. 374).

(40) It is customary for power companies to shut down many of their hydro-electric plants on Sundays and holidays when many of the industries served by them are not in operation and from August 23, 1936, through October 4, 1936, the flow from Norris Dam on Sundays and Labor Day was shut off entirely (Complainants' Ex. 916; Barker 4802-3; Woodward 4131-2).

(41) To produce annually 600,000 to 700,000 kw. firm power for use on a utility system without regard to the economics of its production and subject only to the limitation that there should incidentally result a 9-ft. channel for navigation in the Tennessee River from its mouth at Paducah to Knoxville, a plan would be designed to construct exactly the same dams and power plants as are in-

cluded in the TVA Unified Plan (Kurtz 2127; Crane 2307-9; Bowman 3904, 3969, 3970).

[fol. 511] (42) The development of the Tennessee River for the primary purpose of power development will be best achieved by constructing a small number of high dams rather than a large number of low dams, and under the TVA Unified Plan the seven high dams provided for thereunder is the minimum number of dams practicable for the development of the Tennessee River (Crane 2306; Bowman 3967, 3968, 3970).

(43) The primary purpose of the TVA Unified Plan is power development with incidental navigation facilities and incidental flood control of a degree that is inadequate (Kurtz 2129; Crane 2310).

(44) The Mississippi River drains an area of approximately 1,240,000 square miles covering all or part of 31 states and two Canadian Provinces, and of which total area the Tennessee River drains 40,600 square miles (Kelley 2549-50; Complainants' Exhibits 409 and 105, p. 1; Defendants' Ex. 32, p. 1).

(45) A flood stage of 50 ft. or greater at Cairo is considered dangerous and such stages last between 30 and 60 days. The season of large floods upon the lower Mississippi is from the first of January to the first of June, but there have been floods that exceeded the flood stage in every month of the year except August and October. Floods upon the Tennessee River do not last more than two weeks (Kelley 2551-2).

(46) The lower Mississippi Valley from Cairo to the Gulf, has an area of about 50,000 square miles, of which in its original state approximately 30,000 square miles were subject to flood, and which flooded area, upon the completion of the modified Jadwin Plan for the control of floods upon the Mississippi by the construction of levees and by-[fol. 512] pass channels, will be reduced to 10,000 square miles. Channel improvements have increased the capacity of the Mississippi River to approximately 1,900,000 cubic feet per second, and upon the completion of the modified Jadwin Plan the capacity of the lower Mississippi will be 3,000,000 cubic feet per second, the volume of the maximum flood to be anticipated (Kelley 2550-3, 2569).

(47) Flood control projects should be designed for protection at the minimum cost against the maximum floods to be expected (Kelley 2554; Kimball 4313-14).

(48) The modified Jadwin Plan does not include tributary reservoirs as essential or economical for flood control on the lower Mississippi and no storage reservoirs upon tributary streams have been or could be constructed which would be practical and effective for the control of floods upon the lower Mississippi. Storage reservoirs on tributary streams will reduce the maximum outflow but will increase the duration of the flood (Kelley 2560-61).

(49) No expenditures upon the Tennessee River are justified for flood protection upon the lower Mississippi River and the construction of high dams under the TVA Unified Plan will not eliminate the necessity of or decrease the size or cost of the projects necessary for flood protection upon the lower Mississippi River (Kelley 2555, 2569).

(50) There is a conflict in using the same dams for both flood control and power purposes. Flood control reservoirs [fol. 513] should be empty until the flood arrives, then filled to reduce the flood waters, and when the flood has passed, should be emptied in order to be available to catch the next flood. Power reservoirs must be filled as early as practicable to conserve water for low-water periods and to maintain a maximum head in the reservoir for power generation. Filling the reservoir capacity early in the season for power purposes will decrease the capacity of that reservoir for flood control (Kelley 2563-4; Watkins 3331, 3338-9).

(51) Tributary reservoirs cannot be operated simultaneously for local flood protection, which requires the release of flood water immediately after the passing of the local flood danger, and for the reduction of peak stages on a distant river into which the tributary flows, which requires the reservoirs to be kept empty regardless of local flood conditions until a dangerous stage occurs upon the main river (Kelley 2564-5).

(52) Valley storage is the natural storage of the river and has the same effect as detention storage reservoirs, reducing peak stages and discharge below but increasing the duration of the flood. The valley storage of the Tennessee River in the 1926 flood amounted to 8,000,000 acre-

feet and in the largest flood to be anticipated would amount to approximately 14,000,000 acre feet. The construction of the reservoirs under the TVA Unified Plan will destroy a large amount of the valley storage of the Tennessee River. Dead storage furnishes a head for power generation and reduces the available valley storage capacity, which in turn increases flood stages below the reservoir (Kelley 2566, 2568; Watkins 3340-5, 3348-9; Clemens 3645-8, Complainants' Ex. 411; Kimball 4344, 4361-4).

[fol. 514] (53) The controllable storage capacity of a reservoir is variable, as it is dependent upon the stream flow at the time the storage operations begin and it may be reduced to nothing if the dam is completely flooded out (Kelley 2567; Complainants' Ex. 411).

(54) On a large river, such as the Mississippi, it is cheaper and better to make improvements which will open up the natural drainage channels and drain off the water, than it is to try to hold the water back in reservoirs (Kelley 2570).

(55) Since the Corps of Engineers of the U. S. Army took over the exclusive control of the levees and flood protection facilities upon the Mississippi River in 1928 under the Jadwin Plan, every flood, including the 1937 flood, has been successfully handled and the completed Jadwin Plan, as modified by the Markham Plan in the Act of June 15, 1936, would have been sufficient to control the floods upon the Mississippi of 1912, 1913 and 1927 in addition to the flood of 1937 (Okey 4547-4550, 4554-4555; Clemens 3675-6).

(56) The tributary reservoirs under the TVA Unified Plan will greatly increase the firm power produced by the projects upon the Tennessee River (Kelley 2572).

(57) For attaining flood control only without reference to other uses, it would not be necessary to fill the reservoirs partly. The partial filling is not for flood control but is for the benefit of low water regulation. Low water regulation increases firm power (Woodward 4039; Wessenauer 5467).

[fol. 515]

VIII G

(1) The primary purpose of the dams constructed by the Tennessee Valley Authority upon the Tennessee River and its tributaries is the generation of power with but incidental navigation facilities and inadequate flood protection (Putnam 1955-6; Kurtz 2129; Kelley 2571-2; Crane 2310).

[fol. 516]

A

(1) TVA at the end of the year 1934 owned and operated 157.8 miles of electric transmission lines; at the close of the year 1935, it owned and operated 274.3 miles of such lines; at the end of the year 1936, it owned and operated 1068 miles of such lines, and as of October 15, 1937, owned and operated 1286.9 miles of transmission lines; had 79.1 miles under construction and 176.9 miles authorized by its Board of Directors for construction, or at the close of the year 1937, a total of 1542.9 miles of transmission lines either constructed, under construction or authorized for construction by the Board of Directors (Defendants' Ex. 136). The high tension transmission lines constructed and now being operated by TVA extend across the State of Tennessee, the northwestern portion of the State of Georgia, the northern portion of the State of Alabama, and the northern section of the State of Mississippi (Defendants' Ex. 136-A. Complainants' Exs. 332A and 333A).

(2) At the end of the year 1934, TVA owned and operated eight (8) substations with a total capacity of 9,725 kva.; at the close of the year 1935, it owned and operated fourteen (14) substations with a total capacity of 36,275 kva.; at the close of 1936, it owned and operated forty-seven (47) substations with a total capacity of 175,720 kva., and as of October 15, 1937, owned and operated fifty-five (55) substations with a total capacity of 219,010 kva., had under construction (3) substations with a total capacity of 87,500 kva. and four (4) substations authorized for construction [fol. 517] by its Board of Directors with a total capacity of 39,500 kva., or at the close of the year 1937, sixty-two (62) substations with a total capacity of 346,010 kva. either constructed, under construction or authorized for construction by the Board of Directors (Defendants' Ex. 136).

(3) The Tennessee Valley Authority has expended up to June 30, 1937 for transmission lines a total of \$7,924,164; for substations a total of \$2,826,756 and for temporary substations a total of \$406,208, making a total investment of \$11,157,128. TVA's estimated expenditure for additional transmission lines, substations and other miscellaneous system equipment for the fiscal years ending June 30, 1938 and June 30, 1939 amount to \$4,700,000 and \$5,560,000, respectively (Defendants' Ex. 153, pp. 987 to 991, inclusive). TVA has also acquired and is now operating for stand-by

purposes a steam plant at Tupelo, Mississippi, and a steam plant at Corinth, Mississippi (Karr 5635).

(4) As of October 15, 1937, the total number of rural lines distributing TVA power, exclusive of those of the North Georgia Membership Corporation, was 3086.7, and approximately 490 miles of additional lines were then under construction. Of such total mileage, TVA owned and operated 629.7 miles. Of the total distribution lines, distributing TVA power, only 292 miles were constructed by municipalities or cooperatives. 1,023 miles were constructed and financed by TVA and 1343 miles were constructed by TVA under contracts with municipalities or cooperatives, (Defendants' Ex. 136, Table E), 1,593 miles having been constructed by TVA during its 1937 fiscal year (Defendants' Ex. 154, p. 94).

[fol. 518] (4¼) Expenditures by TVA for distribution facilities up to June 30, 1936 amounted to \$1,809,114. This amount was increased to \$2,447,956 by June 30, 1937 and TVA proposes to expend an additional sum of \$272,000 for distribution facilities during the fiscal year of 1938 (Defendants Ex 153, page 977).

(4½) As of June 30, 1937, TVA owned and directly operated electric distribution facilities in the Counties of Colbert and Lauderdale, Franklin and Morgan, Alabama, serving 1,774 retail customers, which distribution facilities were located in the rural areas of these counties and in the Towns of Waterloo, Margerum, Barton, Pride Station, Spring Valley, Littleville, Oakland, St. Florian, Green Hill, Center Hill, Killen, Center Star, Elgin, Lexington, Sewell, Anderson, Rogersville and Alexander Cross Roads. (Defendants Exs. 136B, 147). This direct retail service was instituted by TVA on October 20, 1934, in Colbert County and on December 4, 1934 in Lauderdale County, Alabama. As of June 30, 1937, the TVA was serving direct 1,074 retail customers in the Counties of Lincoln, Knox, Roane, Union, and Anderson in the State of Tennessee, which direct retail service was instituted by TVA on October 1, 1935 (Defendants' Ex. 154, p. 24; Complainants' Ex. 326).

[fol. 519]

B

(5) On August 25, 1933 TVA adopted and announced the following power policy:

"1. The business of generating and distributing electric power is a public business.

2. Private and public interests in the business of power are of a different kind and quality and should not be confused.

3. The interest of the public in the widest possible use of power is superior to any private interest. Where the private interest and this public interest conflict, the public interest must prevail.

4. Where there is a conflict between public interest and private interest in power which can be reconciled without injury to the public interest, such reconciliation should be made.

5. The right of a community to own and operate its own electric plant is undeniable. This is one of the measures which the people may properly take to protect themselves against unreasonable rates. Such a course of action may take the form of acquiring the existing plant or setting up a competing plant, as circumstances may dictate.

6. The fact that action by the Authority may have an adverse economic effect upon a privately owned utility should be a matter for the serious consideration of the Board in framing and executing its power program. But it is not the determining factor. The most important considerations are the furthering of the public interest in making power available at the lowest rate consistent with sound financial policy, and the accomplishment of the social objectives which low-cost power makes possible. The Authority cannot decline to take action solely upon the ground that to do so would injure a privately owned utility.

7. To provide a workable and economic basis of operations, the Authority plans initially to serve certain definite regions and to develop its program in those areas before going outside.

[fol. 520] 8. The initial areas selected by the Authority may be roughly described as (a) the region immediately proximate to the route of the transmission line soon to be constructed by the Authority between Muscle Shoals and the site of Norris Dam; (b) the region in proximity to Muscle Shoals, including northern Alabama and northeastern Mississippi; and (c) the region in the proximity of Norris Dam (the new source of power to be constructed by the Authority on the Clinch River in northeast Tennessee).

At a later stage in the development it is contemplated to include, roughly, the drainage area of the Tennessee River in Kentucky, Alabama, Georgia and North Carolina, and that part of Tennessee which lies east of the west margin of the Tennessee drainage area.

To make the area a workable one and a fair measure of public ownership, it should include several cities of substantial size (such as Chattanooga and Knoxville) and, ultimately, at least one city of more than a quarter million, within transmission distance, such as Birmingham, Memphis, Atlanta or Louisville.

While it is the Authority's present intention to develop its power program in the above-described territory before considering going outside, the Authority may go outside the area if there are substantial changes in general conditions, facts, or governmental policy, which would necessarily require a change in this policy of regional development, or if the privately owned utilities in the area do not cooperate in the working out of the program.

Nothing in the procedure here adopted is to be construed in any sense a commitment against extending the Authority's power operations outside the area selected, if the above conditions or the public interest require. Where special considerations exist, justifying the Authority's going outside this initial area, the Authority will receive and consider applications based on such special considerations. Among such special considerations would be unreasonably high rates for service and a failure or absence of public regulation to protect the public interest.

9. Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine effort will be made to purchase such facilities from the private utilities on an equitable basis.

[fol. 521] 10. Accounting should show detail of costs, and permit a comparison of operations with privately owned plants, to supply a "yardstick" and an incentive to both private and public managers.

11. The accounts and records of the Authority as they pertain to power will always be open to inspection by the public."

This power policy was reported to the Congress in the first Annual Report of TVA (Complainants' Ex. 113, pp. 22-24.)

(6) The establishment of the power policy of the Authority was an effort to establish a yardstick whereby there could be a case of public ownership to develop what reasonable costs of power may be and for that reason it was necessary for the Tennessee Valley Authority to acquire a market area in which to sell that power (Complainants' Ex. 112, p. 267).

[fol. 522]

C

(7) Up to the present time, TVA has entered into contracts for the sale of electric power with the following municipalities:

Municipality	Date of Contract	Complainants' Exhibit No.
1. Tupelo, Mississippi.....	11-13-33	117
2. Knoxville, Tennessee.....	3- 1-34 (2-19-36) (5-18-36)	118, 125
3. Pulaski, Tennessee.....	3- 8-34	117
4. Amory, Mississippi.....	3- 9-34 (10-15-36)	117, 119
5. Russellville, Alabama.....	3-13-34	126
6. Decatur, Alabama.....	3-14-34	127
7. Sheffield, Alabama.....	3-14-34 (3-16-36)	930, 118
8. Florence, Alabama.....	3-14-34 (7-6-37)	928, 123
9. Tuscumbia, Alabama.....	3-14-34 (3-8-37)	929, 124
10. Athens, Alabama.....	4- 6-34	117
11. Dayton, Tennessee.....	9-12-34	117
12. New Albany, Miss.....	9-13-34 (3-1-37)	117, 120
13. Muscle Shoals, Ala.....	1-19-35	117
14. Okolona, Miss.....	4-23-35 (3-24-37)	117, 121
15. Jackson, Tennessee.....	10-16-35 (9-1-37)	118, 133
16. Dickson, Tennessee.....	10-23-35	118
17. Holly Springs, Miss.....	11-12-35 (2-2-37)	118, 122
18. Memphis, Tennessee.....	12-23-35	118
19. Bolivar, Tennessee.....	12-31-35	118
20. Somerville, Tennessee.....	12-31-35	118
21. Milan, Tennessee.....	12-31-35	118
22. Guntersville, Ala.....	5-21-37	128
23. Chattanooga, Tenn.....	6-17-37	129
24. Middlesboro, Ky.....	7-29-37 (10-20-37)	130, 131
25. Trenton, Tennessee.....	8-23-37	132
26. Paris, Tennessee.....	11- 2-37	134

[fol. 523] (8) Up to the present time the TVA has entered into contracts with the following rural cooperatives, or membership corporations in the states of Mississippi, Alabama, Tennessee and Georgia:

Name	Date of Contract	Com-plainants' Exhibit No.
1. Alcorn County EPA.....	6- 1-34	117
2. Pontotoc, EMC.....	2-15-35	117, 118
3. Prentiss County EMC.....	6-13-35 (12-1-35)	117, 135
4. Monroe County EMC.....	7-19-35	118
5. Tishomingo County EPA..	7-19-35	118
6. Meigs County EMC.....	10-14-35	118
7. Tombigbee EPA.....	10-19-35	118
8. North Georgia EMC.....	6-15-36	118
9. Cullman County EMC.....	8- 4-36	136
10. Gibson County EMC.....	8-13-36	137
11. Middle Tennessee EMC...	8-13-36	138
12. Pickwick EMC.....	8-26-36	139
13. Duck River EMC.....	10-31-36	140
14. Southwest Tennessee EMC.	12- 9-36	141
15. Northeast Miss. EPA.....	3-27-37 (7-27-37)	144, 145
16. Joe Wheeler EMC.....	9-24-37	142
17. Cherokee County EMC.....	11- 2-37	143
18. Tippah County EMC.....	11- 5-37	224

(9) The schedule of wholesale and resale rates in all of the contracts between TVA and cooperatives and municipalities are uniform and the rate to be paid by such purchasers is based upon his monthly kilowatt hour consumption, the rate being decreased in specific progressive steps up to 1,000,000 kilowatt hours per month (Schedule A-1 attached to each contract).

[fol. 524] (10) Up to the present time, TVA has entered into contracts to serve directly the following industrial customers:

Name	Contract Date	Term of Contract	Complainants' Exhibit No.
1. Ala. Asphaltic Limestone Co.....	5- 1-36	5 yrs.	146
2. Goodyear Decatur Mills.....	5 -1-36	1 yr.	147
3. L. & N. Railroad Co.....	6-22-36	5 yrs.	147
4. Aluminum Co. of America.....	7-17-36	4 to 6 yrs.	151
	7-20-37	20 yrs.	152
5. Monsanto Chemical Co.....	5-15-36; 5-16-36 and 6- 2-36	10 yrs.	118
6. Volunteer Portland Cement Co....	8-14-36	10 yrs.	157
7. Rockwood Alabama Stone Co.....	8-25-36	5 yrs.	149
8. Western State Hospital.....	9- 8-36	5 yrs.	
9. Robbins Tire & Rubber Co.....	11- 1-36	5 yrs.	150
10. American Aggregate Corp.....	3- 9-37		153
11. Wade & Richey Mining Co.....	5- 1-37	1 yr.	155
12. War Dept. at Sardis Dam.....	5- 4-37	4 yrs.	159
13. Lacey Asphaltic Limestone Co....	5-13-37	1 yr.	156
14. Victor Chemical Works.....	7- 2-37	20 yrs.	160
15. Electro Metallurgical Co.....	8-17-37	20 yrs.	161
16. L. N. Gross Company.....			(1399)

(11) All industrial contracts provide for the sale of firm power and for the right of the customer to call for additional power within specified limits upon giving specific notice, and in the cases of Monsanto Chemical Company, Aluminum Company of America, Victor Chemical Works and Electro Metallurgical Company, which provide for secondary power as well as firm power, the contracts contain provision for from 5 to 21 days notice by TVA for interrupting and from 7 to 15 days notice for resuming delivery of such secondary power. Most industrial contracts provide that the point of delivery shall be on the low-tension side of the transformer.

(12) All contracts for the sale of power by TVA to a municipality or a co-operative association expressly reserve in TVA control of resale rates and control of the operation of the distribution facilities owned by the municipality or cooperative association (Complainants' Exs. 117, 118, 119-145, incl., 196, 224, Defendants' Ex. 144).

[fol. 525] (13) All contracts between TVA and municipalities not owning at the time of the contract an electric distribution system contain the following provisions, among others:

(a) That the contract shall continue for a period of twenty years and in some instances 30 years;

(b) That the municipality is to use all reasonable diligence in acquiring by construction or purchase a distribution system;

(c) That TVA will construct and install transmission and transformation facilities;

(d) That the energy supplied the City will be metered at the low tension side of the stepdown transformer of the TVA substations, which point shall be the point of delivery;

(e) That municipality agrees to sell the electricity at the standard or uniform rates prescribed in the contract and not to depart therefrom except by consent of the TVA;

(f) That the revenues derived from the municipal distribution system will be expended only in the following order:

(1) In payment of operating expenses.

(2) In payment of interest, amortization charges or sinking fund payments on bonds applicable to the electric system.

(3) In the establishment of reserves for replacements, new construction, contingencies and working capital.

(4) In paying to the city a return on the investment specified in the contract to be a particular sum which is arrived at by taking the present appraised value of the property, less all outstanding liabilities incurred in the construction or acquisition of the system of not more than 6% per annum, on the particular sum set forth together with an amount stated to be equivalent to the municipal taxes, which is computed in accordance with the schedule of terms and conditions attached to and made a part of said contract.

[fol. 526] (5) All remaining revenues to be devoted to the retirement of electric system bonds so long as any such bonds are outstanding and if not so devoted shall serve as a basis for the reduction or elimination of surcharges and thereafter for the reduction of rates by agreement of the parties.

(g) The recital of standard and uniform rules and regulations governing the municipality's operation of its distribution system, which rules and regulations are expressly agreed to be of the essence of the contract and which cannot

be changed except with the consent of TVA. The following are some of the rules and regulations:

(1) Requirement that municipality procure written service applications from customer before supplying service.

(2) Method of determining classification of customers for service.

(3) Requirement of deposit by customers to guarantee payment of electric bill.

(4) Designation of point of delivery to customer, standards of customer's wiring, right to inspect customer's wiring, payment by customer for installing underground wires, customer's responsibility for municipality's property, and access to customer's premises.

(5) Time and manner of rendering bills to customers and penalty for nonpayment by customer.

(6) Right of municipality to terminate service for violation of its rules and regulations.

(7) Reconnection charge and charges for temporary service.

(8) Resale by customers prohibited.

(9) Rules and regulations required to be made a part of all contracts between the municipality and its customers.

(h) Standard and uniform "terms and conditions" which are of the essence of the contract and which cannot be changed except with the consent of the TVA. Included among the terms and conditions are the following:

[fol. 527] (1) Municipality required to administer electric system as a separate department and maintain a separate fund for its electric revenues and not mingle them with other funds of the municipality.

(2) Municipality required to keep books of account of its electric operations according to the system and in the manner prescribed by TVA.

(3) Municipality required to furnish TVA such financial and operating reports as may be requested.

(4) Municipality required to permit agents of TVA free access to books and records relating to electric operations.

(5) Method of determining "present value" of municipality's electric system and method of determining municipality's initial investment, which is defined as "present value", less all outstanding liabilities incurred in the construction or acquisition of the electric system.

(6) Municipality's return on investment as defined therein limited to 6% per annum.

(7) Manner of computing payments in lieu of municipal taxes on electric operations within the municipal limits.

(8) Requirement that electric department pay for electric services.

(9) Municipality not permitted to withdraw electric department revenues for general funds in excess of allowable rate on investment and municipal tax equivalent, unless municipality's investment reduced to the extent of such excess withdrawals.

(10) Municipal electric department limited to loans to general fund of municipality of one year or less without right of renewal.

(11) Municipality required to publish at the end of each fiscal year a statement of its investment, outstanding loans and advances, and immediately furnish TVA with a copy thereof.

[fol. 528] (12) Municipality during development period permitted to impose surcharge on classes of the customers subject to such surcharge under the standard schedule of resale rates provided for in the contract.

(13) Adjustability of rates at which municipality purchases power from TVA dependent upon cost of living index for the United States as computed by the Department of Labor.

(14) Municipality not permitted to sell electricity for submetering or further resale.

(i) Municipality prohibited from discriminating between members of the same class of customers as provided for in the contract or from rebating or extending concessions to any customer.

(j) Assignment of contract prohibited without consent of TVA.

(k) TVA agrees to enter into negotiations for extension of contract at least two years before its expiration.

(14) All power contracts made by TVA with municipalities then owning an electric distribution system, in addition to the above stated provisions, provide that:

The municipality shall add to the standard TVA resale rates a temporary amortization charge of 1¢ per kilowatt

hour, such charge to be not less than 25¢ or more than \$1.00 per customer per month, for the purpose of amortizing the municipality's electric indebtedness, and values the electric system by taking its replacement cost new, less depreciation and the indebtedness applicable to the electric system.

(Complainants' Exs. 118 (contracts with Towns of Bolivar, Somerville, Milan and Dickson, Tennessee; and Holly Springs, Mississippi), 117 (contract Okolona, Mississippi), 132, 122, 120, 119.) The same provision is found in all contracts with cooperatives.

[fol. 529] (15) In some of the power contracts made by TVA with municipalities, it is provided, in addition to the provisions referred to above, that:

(a) TVA will render without compensation such accounting, legal and engineering assistance looking to the acquisition of the municipal distribution system as TVA may deem advisable or helpful (Complainants' Exs. 928, 929, 930).

(b) Municipality agrees to grant a franchise to TVA over its streets and alleys for serving the city with electricity or the areas outside of the corporate limits (Complainants' Exs. 123 and 928).

(c) That the municipality shall be permitted to jointly use TVA poles for its distribution lines (Complainants' Exs. 123 and 928).

(d) TVA will further the economic welfare of the municipality by fostering and promoting the increased use of electricity within the municipality (Complainants' Exs. 117, (Contracts with Pulaski and Dayton, Tennessee; Athens and Muscle Shoals, Alabama; and Amory, Okolona and New Albany, Mississippi) 126, 127, 928, 929).

(16) All power contracts between TVA and cooperatives contain among others, the following provisions:

(a) That the contractual period shall be twenty years.

(b) That the energy supplied will be delivered on the low tension side of the substation or substations which are owned and operated by TVA.

(c) That after payment of operating expenses and certain specified costs and reserves, all remaining income shall

be devoted to reimbursement of membership charges or to reductions in rates.

(d) That the cooperative shall not pledge, mortgage or otherwise alienate, except in the normal course of business, its properties or revenues without the written consent of TVA.

(e) That the cooperative agrees to resell the electricity which it purchases from TVA at the standard or uniform resale rates prescribed in the contract and not to depart therefrom except with the consent of TVA.

[fol. 530] (f) That the cooperative will not serve any non-member except with the consent of TVA.

(g) That the cooperative extend its memberships without discrimination to any person, corporation, co-partnership, municipality, political body or subdivision within the area of its service; that the minimum installment on memberships shall not be fixed at less than \$10.00 without first securing the written consent of TVA.

(h) TVA to render, in some cases without charge, advisory services in personnel and administrative problems; to secure the attendance of its officers at meetings of the corporation, its Board of Directors or Executive Committee; to make available the facilities and services of its personnel division in the selection of employees; and to render professional services at the expense of the cooperative.

(i) That the cooperative will not employ persons deemed by Authority to be unqualified or unnecessary.

(j) That TVA shall have the right to use cooperative's poles and wires for transmission purposes and for service to industrial customers with a demand of 1,000 kw. or more.

(k) That cooperative will file annually with TVA a complete report in the form prescribed by TVA of the results of its operations, the condition of its property, and such other information as TVA may require, as well as such additional reports and information, from time to time, as TVA requests.

(l) That all employees who handle money of the cooperative shall be bonded.

(m) That the contract is not assignable or transferable without the consent of TVA.

(n) For "terms and conditions," which are of the essence of the contract and cannot be modified or changed without the consent of TVA, and which are substantially the same as those provided for in the contracts between TVA and municipalities herein referred to in Finding IX-13 hereof.

(o) For a "schedule of rules and regulations" which are of the essence of the contracts and which cannot be changed or modified except by the consent of TVA. The provisions of the "schedule of rules and regulations" are substantially the same as those provided for in contracts between TVA and municipalities herein referred to at Finding IX-13 hereof.

[fol. 531] (16¼) All of the TVA contracts with municipalities and cooperatives permit the purchaser to increase its demand for electric power upon specified notice and in the majority of such contracts such increases are without limit as to the amount.

(16½) Under the provisions of the several contracts between TVA and the municipalities and cooperative associations, the municipality or cooperative association is a mere bill-collecting agency or instrument through which TVA is engaging and proposes to continue to engage in the local proprietary business of distributing and selling electric power.

[fol. 532]

D

(17) Rural cooperative associations have been organized in the states of Alabama, Tennessee, Georgia and Mississippi, for the purposes of distributing TVA power. Seven such corporations have been organized in Alabama (Complainants' Exs. 267 to 274 inclusive), fourteen in Tennessee (3185 and Complainants' Ex. 688), one in Georgia (Complainants' Exs. 381 and 382) and eleven in Mississippi (Complainants' Exs. 943-954, inclusive). All such cooperative associations have been incorporated since May 18, 1933, and have procured franchises in ten counties in Alabama and forty-five counties in Tennessee for the purposes of erecting, constructing, operating and maintaining lines and

distributing and selling electricity therein (Complainants' Exs. 214 to 223 inclusive; and 275 to 320 inclusive).

(18) TVA has promoted the organization of rural cooperatives for the purpose of distributing TVA power, has directed and assisted in their organization and financing, and has controlled their operation. As a part of these activities it has issued minute instructions covering the procedure to be followed, as approved by it, in the organization of new cooperatives, including the forms of agreements to be entered into between the cooperative and its customers (Complainants' Ex. 918). It has directly assisted and advised the organizers of cooperative associations and their officers in all matters relating to the formal organization (Supplement A to December 7 Session, pp. 218-220, 221). It has prepared all contracts between TVA and such cooperatives. (Supplement A to December 7 Session, pp. 218-220, 224, 233). It has made the necessary surveys and studies and has assisted otherwise in the procurement of loans from R.E.A. (Supplement A to December 7 Session, p. 230). It pays the sum of \$15.00 toward the cost of wiring for electricity the houses of its customers and customers of cooperatives served by it if an electric water heater or range is installed, and \$30.00 if both appliances are installed (Supplement A to December 7 Session, pages 16 to 21, inclusive, and page 179; Complainants' Ex. 394 to 397 inclusive).

(19) TVA has financed for municipalities and cooperatives a large number of rural distribution lines (Defendants' Ex. 136), and has also loaned funds to cooperatives with which to purchase urban distribution systems including the distribution systems in the towns of Bruce, Caledonia, and Smithville, Mississippi and Gibson, Tennessee, (Complainants' Exs. 181, 592 and 595). The indebtedness owed to TVA on this account amounted to \$1,424,665.70 as of June 30, 1936, (Complainants' Ex. 116, page 486), and this indebtedness had increased by June 30, 1937, to the sum of \$1,582,412.66 (Defendants' Ex. 154, p. 110) TVA intends to continue this policy (Defendants' Ex. 153, page 978).

(20) The TVA in some instances has constructed distribution systems in advance of the organization of any cooperatives (Complainants' Exs. 530-531, 534, 535, 553). (Watson 6115-6116). In a number of other instances, TVA has con-

structed lines pending their purchase by the cooperatives, agreeing to collect membership fees, to connect service to prospective customers, to render and collect bills and perform other like services including the furnishing of clerical and stenographic service (Complainants' Exs. 176, 177, 178, 179, 180, 588, 596, 599, 601, 610, 626). In a number of in-[fol. 534] stances, TVA has transferred to cooperatives distribution lines and other equipment and has financed and constructed rural lines to be paid for over a 20-year period, and in some instances an unlimited period at 3½ per cent interest, out of the income from the property (Complainants' Exs. 577, 583, 584, 587, 595, 170, 607, 622, 117 (Alcorn County EPA), 181, 175, 173, 618, 605, 609, 593, 592, 1704 and 163).

(21) TVA also supervises the operations of rural cooperative associations by selecting operating employes (Complainants' Ex. 399); by preparing their rules and regulations for operation (Complainants' Ex. 401); by setting up the forms in which the cooperative's books shall be kept (Complainants' Ex. 406); by attending meetings of the directors of the cooperatives (Complainants' Exs. 399, 400, 402, 403, 404, 405) and by having copies of all correspondence of the cooperative sent to the TVA district manager (Complainants' Ex. 400).

(21½) Some if not all of the rural cooperatives are so supported, controlled, and dominated by TVA that their operations are in fact the operations of TVA, and the turning over of the nominal charge of such operations to such cooperative associations is a mere cloak to conceal the vast scale of TVA's direct retail operations.

[fol. 535]

A

(1) Adequacy of facilities means the availability in sufficient quantity of distribution, transmission and generation facilities at all times to assure ability to take care of immediate loads and any reasonable expectant increase in load with a sufficient margin so as to assure the supplying of proper service (Sporn 2230).

(2) Prudent utility management requires that a utility shall provide enough surplus capacity to take care of its actual and potential demands in the period of time during which new facilities can be added, and that too great a sur-

plus, resulting in non-productive facilities and higher operating costs, be avoided (Sporn 2231; Moreland 2890; Thomas 5240; Middlemiss 2331).

(3) The present generating facilities of the Complainant Companies are adequate to meet the present loads on their systems and together with the additional capacity scheduled or already under construction will adequately supply their power requirements for at least two or three years in the immediate future (Sporn 2252 and Complainants' Exs. 367 to 370, inclusive; Middlemiss 2335, 2336, 2339 and Complainants' Exs. 371 and 372; Rankin 2401, 2417, 2418 and Complainants' Exs. 374 and 375). A steam generating plant can be added to a system within one to two years, and a hydro plant can be added within two to three years (Sporn 2252; Rankin 2419; Moreland 2890; Thomas 5240).

[fol. 536] (4) The present generating facilities of the public utility companies operating within a 250 mile radius of any of the dams included in the TVA Unified Plan are adequate for the present loads in the territory and together with the additional capacity definitely scheduled or already under construction will be adequate to meet the estimated increased load growth during the years 1938 and 1939 (Moreland 2894 and Complainants' Exs. 501, 502, 503). The utility companies can readily build to meet any requirements subsequent to 1939 unless they are prevented by regulatory authority or by the impairment of their financial status by Federal competition (Moreland 2899, 2900). In fact, in the past, facilities have been constructed to provide for increment expansion (Sporn, 2255-56; Guild 161; Yoder 364; Barry 564-5). Increment expansion is an economic development of facilities and is provided in anticipation of load growth.

(5) The generating facilities of each of the following groups of companies are interconnected and integrated into a single coordinated system or power pool, and such facilities of each group are operated as a unit:

(a) The Appalachian Electric Power Company, Kentucky and West Virginia Power Company, and the Kingsport Utilities, Inc., are integrated into a single system (Sporn 2233, Complainants' Ex. 49) and are also interconnected with a group of affiliated companies in Ohio, In-

diana, and Michigan and with non-affiliated companies in Tennessee and North Carolina (Sporn 2234).

(b) The Complainants Alabama Power Company, Mississippi Power Company, The Tennessee Electric Power Company and the non-complainants Georgia Power Company, Gulf Power Company and South Carolina Power Company, [fol. 537] together form the integrated system of Commonwealth & Southern Corporation in the South (Middlemiss 2285, 2288, 2337) and also have interconnections with the Carolina Power & Light Company, the Florida Power Corporation, the South Carolina Electric & Gas Company, the Duke Power Company and the Aluminum Company of America (Middlemiss 2289).

(c) The Carolina Power & Light Company, The Tennessee Public Service Company and the Holston River Electric Company (Rankin 2398, 2394).

(d) The Complainants, Memphis Power & Light Company, West Tennessee Power and Light Company, Mississippi Power & Light Company and non-complainants, Louisiana Power & Light Company and Arkansas Power & Light Company (Rankin 2398, 2426, 2394).

(e) The East Tennessee Light & Power Company and Tennessee Eastern Electric Company (Ide 507).

(6) None of the Complainant Companies has ever failed to meet the load requirements of their customers (Middlemiss 2341, Complainants' Exs. 372, 375), nor have they ever refused additional business due to lack of facilities (Sporn 2251).

[fol. 538]

B

(7) The Complainant companies serve the electric power requirements of substantially all industrial enterprises doing business in the territories served by them (415-17, 329, 660, 1254, 300, 306, 315, 370, 504, 1031, 1213-4, 1254, 612-13, 1295, 1332, 1348, 1368, 1392, 1396, 1404-5, 1471) with the following exceptions:

(a) Those industries now being served by TVA (1121-1125, 1397-1399).

(b) Those industries which require steam in processing operation and are thus able to produce their own power as

a by-product (329, 415-6, 1214, 1254, 1295, 1332, 1348, 1368, 1393, 1396, 1404-5, 1471).

(c) Those industries such as sawmills and woodworking plants which have waste fuel products and can produce power without fuel cost (1214, 1254, 1295-6, 1332, 1369, 1393, 1394, 1404-5, 1471).

(d) Small and scattered enterprises such as cotton gins, ice plants and flour and feed mills which operate seasonally and which depend upon steam or other mechanical power (1214, 1254, 1295, 1332, 1348-49, 1368, 1405, 1471).

All of these businesses except those being served by TVA have their own power units which would have to be abandoned in order to take central power service (1255, 1296, 1348, 1368, 1405, 1472).

(8) The Complainant Companies serve the electric power requirements of substantially all commercial enterprises doing business in the territory served by them with the exception of a very few scattered rural stores which do not stay open at night (1215, 1255, 1296, 1332, 1350, 1369, 1406, 1473, 329, 300, 370, 660, 504, 415-17, 306, 315).

[fol. 539] (9) The Complainant Companies are now serving, either directly or indirectly, substantially all of the domestic demand within the territory served by them accessible to existing company facilities (1215, 1216, 1255-56, 1297, 1332, 1350, 1369, 1393-4, 1396, 1406, 1474, 427, 454, 660, 300, 306, 315, 329, 370, 504).

(10) In the areas where TVA power is now available for rural distribution, there is no substantial existing domestic demand beyond reach of existing distribution facilities, which, at the present time, comes within the minimum requirements of applicable State regulations or within the recommended minimum requirements of 662 KWH. per month per mile as adopted by TVA in its "Rural Electrification Survey—Neighborhood Plan" (Complainants' Ex. 918; 1217, 1261, 1299, 1333-34, 1351-52, 1396, 1407-8, 1475-6, 1371).

[fol. 540]

C

(10) All of the high dams built and to be built by TVA will be united by heavy-duty transmission lines, extending

from the power dams on the tributaries of the Tennessee, designated as Norris, Hiwassee and Fontana, to the Gilbertsville dam on the main river somewhat above its mouth. This grid system constitutes a power pool, from which at any point, energy can be drawn without reference to the point of generation. The completed power pool under the Unified Plan, will provide 660,000 KW. of firm energy, or 5,780,000,000 kilowatt hours of firm energy per year (Complainants' Ex. 328).

(11) The total amount of electricity generated for public use by public utilities during 1936 in the state of Tennessee was only a little over 1,000,000,000 kilowatt hours (Complainants' Ex. 486). The total generation for public use by public utilities in Tennessee, Alabama, and Mississippi in 1936 was only about 3,700,000,000 kilowatt hours (Complainants' Ex. 486). In 1936 the total generation of electricity for public use by public utilities in the seven states in which any part of the Tennessee River basin lies, that is Virginia, North Carolina, Georgia, Kentucky, Tennessee, Alabama and Mississippi, was only about 9,300,000,000 kilowatt hours (Complainants' Ex. 486).

(12) The market for electric power, as represented by total sales in the year 1936 to ultimate consumers, directly and indirectly by all public utilities and municipal systems, [fol. 541] other than by TVA and its wholesale contractors, within a 100-mile radius of any of the dams included in the TVA Unified Plan, is 3,661,000,000 kilowatt hours per year, and within a 150 mile radius of any of the dams included in the TVA Unified Plan is, 7,162,000,000 kilowatt hours per year, (Moreland 2861; Complainants' Ex. 499). The territory now being served by each of the complainant companies lies wholly or in large part within such 150 mile-radius (Complainants' Ex. 327).

(13) It is technically feasible to transmit power a distance of 250 miles without any relaying or intermediate feeding into the transmission lines, (Sporn 2258), and it is commercially feasible to transmit electric energy from the TVA power pool for distribution in the area served by each of the Complainant companies (Moreland 2865-66).

D

(14) On September 14, 1933, the Tennessee Valley Authority announced its wholesale power rates and approved retail

rates for the sale of electric energy (Complainants' Ex. 113, pp. 35, 36).

(15) The wholesale rates of the Tennessee Valley Authority are substantially lower than the wholesale rates of any of the Complainants (1088).

[fol. 542] (16) The retail rates for every class of service prescribed by TVA and charged by the municipalities and cooperatives purchasing power from the Tennessee Valley Authority are substantially lower than the retail rates of any of the Complainants (1088).

(17) The rates charged by the Tennessee Valley Authority in all classes of service including rural customers, domestic customers and commercial customers, which it serves, are substantially lower than the rates for the same classes of service of any of the Complainants (1088).

(18) The industrial rates charged by the Tennessee Valley Authority are substantially lower than the published rates of any of the Complainants (1094).

(19) Tennessee Valley Authority has published these rates generally and they are well known throughout the Tennessee Valley area (1771-2; 1784-5).

E

(20) The sale of the vast amount of electric energy which will be available for distribution from the TVA power pool, at rates substantially lower in all classes of service than the existing rates of privately-owned electric utilities, including the complainant companies in an area now adequately served by such utilities, where the total consumption is at present exceeded by the quantity of power so to be produced and available for sale over the TVA grid system, will necessarily regulate and reduce the rates of all of the privately-owned utilities now doing business in such area, including the rates of the complainant companies to a level at least as low if not lower than the rates promulgated by TVA.

(21) Between 12,000 and 15,000 miles of transmission lines would be necessary to market the 7,670,000,000 kilowatt hours of firm and secondary power which would be

produced by the TVA in a normal water year. The total transmission lines of the Complainants is 11,314 miles (Moreland 2868-71; Complainants' Ex. 116, pp. 456-7; Complainants' Ex. 500). Defendant, A. E. Morgan, has estimated that it may require an expenditure of \$100,000,000 to complete the proposed transmission and distribution systems of TVA, so that it will be an integrated unit (Complainants' Ex. 109, page 166).

(22) Although the present high tension transmission system so far constructed by TVA is only the beginning of the high tension transmission system which will be necessary to deliver the vast amounts of power which will be available through the TVA power pool, the existing TVA high tension transmission lines have already been extended to all of the large existing load centers in Tennessee, with the exception of Nashville, and upon completion of the proposed transmission line of the TVA to Nashville, the TVA transmission system will completely duplicate the transmission system of The Tennessee Electric Power Company (Miller 1690-1691). This high tension transmission system of TVA interconnects all of the generating facilities of TVA (Miller 1683, Defendants' Ex. 136-A), is designed to serve more loads than are served at present by TVA and [fol. 544] can be readily extended to serve all of the principal load centers in the area served by the Complainant companies (Miller 1680, 1683-4). In the construction of certain of these transmission lines the Authority constructed said lines with an excess capacity of several times its initial operating load in anticipation of future load growth and possible extensions of such lines to other areas (Complainants' Ex. 532). If the existing TVA system had been designed for the purpose of serving small municipalities and rural customers, the engineering economics would have required the design of an entirely different type of system than the one so far constructed (Complainants' Ex. 334).

(23) The operation of the TVA rates in municipalities now being served by Complainant companies, for example, in Memphis and Knoxville, will force such companies to reduce their rates to the same level, which will result in the ultimate bankruptcy of the respective companies (Ford 1759, 1760; Lamar 1790).

F

(24) Prior to the organization of TVA there was no movement in the territories served by the Complainant companies for municipal ownership of electric distribution systems, (Ford 334) and in fact many existing municipally owned distribution systems were acquired by the Complainant companies (Stanley 1046; Complainants' Exs. 14, 186). Since the organization and commencement of operation of the Tennessee Valley Authority, the following cities served by Complainant companies have entered contracts with the TVA:

(fol. 545)	Municipality	How Served	Exhibit Number or Record Reference
	Florence, Alabama	Alabama Power Company	Complainants Ex. 191
	Sheffield, Ala.	Alabama Power Company	Complainants Ex. 191
	Tuscumbia, Ala.	Alabama Power Company	Complainants Ex. 191
	Athens, Ala.	Alabama Power Company (Wholesale)	Defendants Ex. 153 p. 995
	Tupelo, Miss.	Miss. Power Co. (Wholesale)	Defendants Ex. 153 p. 995
	Jackson, Tenn.	West Tenn. Power & Lt. Co.	1410
	Decatur, Ala.	Alabama Power Co.	Complainants Ex. 191
	Russellville, Ala.	Alabama Power Co.	Complainants Ex. 191
	Guntersville, Ala.	Alabama Power Co.	Complainants Ex. 191
	Knoxville, Tenn.	Tennessee Public Service Co.	297
	Chattanooga, Tenn.	Tennessee Electric Power Co.	151
	Memphis Tenn.	Memphis Power & Light Co.	329
	Paris, Tenn.	Ky-Tenn. Light & Power Co.	1263, 2157

The business in the City of Memphis represents the major part of the business of the Memphis Power & Light Company (Ford 329) and the business in the city of Knoxville represents 90 per cent of the electric business of the Tennessee Public Service Company (Lamar 297).

In addition, the following municipalities have held elections resulting, in the authorization of a bond issue with which to acquire a municipally owned distribution system for the purpose of distributing TVA power:

Municipality	Present Service
1. Gallatin, Tenn.....	Ky-Tenn. L. & P. Co. (1263)
2. Newbern, Tenn.....	Ky-Tenn. L. & P. Co. (1263)
3. Clarksville, Tenn.....	Ky-Tenn. L. & P. Co. (1263)
4. Starkville, Miss.....	Miss. Power Co. (271, 1218)
5. Aberdeen, Miss.....	Miss. Power Co. (271, 1218)
6. Columbus, Miss.....	Miss. Power Co. (271, 1218)
7. Bessemer, Ala.....	Birmingham Elec. Co. (321 and Complainants' Ex. 191)
8. Fairfield, Ala.....	Birmingham Elec. Co. (311 and Complainants' Ex. 191)
9. Tarrant City, Ala.....	Birmingham Elec. Co. (311 and Complainants' Ex. 191)

[fol. 546]

Municipality	Present Service
10. Hartselle, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
11. Courtland, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
12. Oneonta, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
13. Towp Creek, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
14. Enterprise, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
15. Scottsboro, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
16. Albertville, Ala.....	Ala. Power Co. (Complainants' Ex. 191)
17. Columbia, Tenn.....	The Tenn. Electric Power Co. (Complainants' Ex. 116, Page 536)
18. Henderson, Tenn.....	West Tennessee P. & L. Co. (Complainants' Ex. 116, Page 537)
19. Lewisburg, Tenn.	The Tenn. Elec. Power Co. (Complainants' Ex. 335 A)
20. Fayetteville, Tenn.....	The Tenn. Elec. Power Co. (Complainants' Ex. 335 A)
21. Etowah, Tenn.....	Power sold by The TEP CO. at wholesale (Complainants' Ex. 335 A)

(25) In addition to the municipalities which have held elections to acquire a municipally owned distribution system for the purpose of distributing TVA power, the following cities and towns served by the Complainant companies have officially applied for TVA power, (Complainants' Ex. 116, pp. 537-38):

State and Town	How Served
Alabama:	
Boaz.....	Ala. Power Co.
Cherokee.....	Ala. Power Co.
Courtland.....	Ala. Power Co.
Falkville.....	Ala. Power Co.
Hartselle.....	Ala. Power Co.
Huntsville.....	Ala. Power Co.
Leighton.....	Ala. Power Co.
Madison.....	Ala. Power Co. (Compts' Ex. 3)
Moulton.....	Ala. Power Co.
Red Bay.....	Ala. Power Co.
Town Creek.....	Ala. Power Co. (Compts' Ex. 3)
Vina.....	Ala. Power Co. (Compts' Ex. 3)
Valley Head.....	Ala. Power Co. (Compts' Ex. 3)

[fol. 547]

State and Town
Kentucky:

How Served

Trenton.....Ky.-Tenn. L. & P. Co.

Mississippi:

Coffeeville.....Mississippi P. & L. Co.
West Point.....Mississippi Power Co.

Tennessee:

Adamsville.....The Tenn. Elec. Power Co.
Clinton.....The Tenn. Elec. Power Co.
Coal Creek.....The Tenn. Elec. Power Co.
Columbia.....The Tenn. Elec. Power Co.
Decaturville.....The Tenn. Elec. Power Co.
Dresden.....Ky.-Tenn. L. & P. Co.
Dyer.....Ky.-Tenn. L. & P. Co.
Etowah.....Power sold at wholesale to Etowah
Power Co. (Compts' Ex. 335 A)
Fayetteville.....The Tenn. Elec. Power Co.
Gallatin.....Ky.-Tenn. L. & P. Co.
Gleason.....Ky.-Tenn. L. & P. Co.
Greenfield.....Ky.-Tenn. L. & P. Co.
Humboldt.....West Tenn. P. & L. Co.
LaFollette.....The Tenn. Elec. Power Co.
Lebanon.....The Tenn. Elec. Power Co. sells
power at wholesale to municipal
system
Lenoir City.....The Tenn. Elec. Power Co.
Lewisburg.....The Tenn. Elec. Power Co.
Livingston.....The Tenn. Elec. Power Co.
Martin.....Ky.-Tenn. L. & P. Co.
Murfreesboro.....The Tenn. Elec. Power Co.
Obion.....Ky.-Tenn. L. & P. Co.
Oliver Springs.....The Tenn. Elec. Power Co.
Parsons.....The Tenn. Elec. Power Co.
Ripley.....West Tenn. P. & L. Co.
Rockwood.....The Tenn. Elec. Power Co.
Rogersville.....Holston River Elec. Co.
Rutherford.....Ky.-Tenn. L. & P. Co.
Savannah.....The Tenn. Elec. Power Co.
Sharon.....Ky.-Tenn. L. & P. Co.
Winchester.....The Tenn. Elec. Power Co.

[fol. 548] (25½) The electric power business is not static. The electric power production in the nation as a whole has followed the trend of industrial activity, reaching a low point in March, 1933 (Complainants' Ex. 99-A). With the business recovery beginning in 1933, electric power produc-

tion increased sharply until the late summer of 1937 (Complainants' Ex. 99-A). The trend of electric power production and sales among the complainant companies has followed the trend in the nation as a whole (Complainants' Exs. 10, 15, 28, 30, 35, 38, 55, 56, 57, 76, 84, 85, 96, 104, 368, 372, 374, 375, 376). During the years 1929 to 1933 the electric power demand of the complainant companies declined (Complainants' Exs. 28, 38, 55, 56) due largely to the reduction in the industrial demand during that period. With the resumption of industrial activity there has been, beginning with 1933 and continuing to the latter part of 1937, a very substantial increase in the electric power demand of the complainant companies (Complainants' Exs. 10, 15, 28, 35, 38, 55, 56, 57, 84, 85, 368, 372, 374, 375, 376). Since September 1937, and prior thereto for certain complainants, there has been a definite decline in the electric power demand of the complainant companies (Rankin—2241, 2244; Barry—636-8; Complainants' Exs. 98, 942).

Over the period of the past eight to twelve years the average increase in electric power demand of the complainant companies has been at a rate of approximately 5% per year (Complainants' Exs. 10, 15, 28, 30, 35, 38, 55, 56, 57, 76, 84, 85, 96, 104, 368, 372, 374, 375, 376), and there has been a corresponding steady increase in their facilities (Complainants' Exs. 368, 372, 374, 375, 376, 501). This normal expectancy of growth and increased business is a valuable right and asset of each of the complainant companies and the loss of such expectancy of growth is a substantial injury to their properties and businesses.

[fol. 549] (26) Of the larger industrial power consumers with which TVA has made contracts the Rockwood, Alabama Stone Company is a former customer of the Alabama Power Company (Stanley 1123).

The Monsanto Chemical Company purchased power requirements for its phosphoric acid operations from the Alabama Power Company, the revenue from which business amounted to \$387,000 per year (Stanley 1122). Upon the removal of the phosphoric acid operations of such company to Columbia, Tennessee, The Tennessee Electric Power Company entered into negotiations with said Chemical Company to furnish it with 50,000 kilowatts of power at its Columbia, Tennessee, plant, and after agreeing upon the terms of a proposed contract, Monsanto Chemical Company questioned the financial responsibility of The Tennessee

Electric Power Company because of the competitive operations of TVA and refused to accept an offer to deposit \$1,500,000.00 of the first mortgage bonds of The Tennessee Electric Power Company as a guarantee of performance of the contract, for the reason that the securities offered were unsatisfactory, because of the competitive situation created by TVA (Complainants' Ex. 628; Willkie 3120-29).

L. N. Gross Company, in 1936, with the aid of The Tennessee Electric Power Company, located a plant at Fayetteville, Tennessee, and electricity was furnished during the construction period by The Tennessee Electric Power Company. Upon completion of construction, said Power Company, at the request of said L. N. Gross Company, connected electric service after installing a substation of sufficient size [fol. 550] and capacity to accommodate the load. Thereafter, L. N. Gross Company terminated its service and purchased TVA power (1399).

Volunteer Portland Cement Company was the largest industrial customer of Tennessee Public Service Company, from which it received an annual revenue approximating \$125,000 (1782). A transmission line with a capacity many times in excess of said Cement Company's requirements and which will be available for service to future loads in that area was constructed by TVA from Norris Dam to said Cement Company's plant, a distance of approximately 20 miles, at an expenditure of \$269,000 (Complainants' Ex. 564 and Defendants' Ex. 154, p. 92). On September 14, 1937, TVA assigned said contract to the City of Knoxville (Complainants' Ex. 158), and although TVA will supply power direct to Volunteer Portland Cement Company, said city will pay TVA for the power so delivered at the standard wholesale rates, as provided for in the contract between TVA and the City of Knoxville (Complainants' Ex. 118), and will collect from Volunteer Portland Cement Company at the standard resale rates, as provided in said Complainants' Ex. 118 (1786-87). There has been agitation among other industrial customers of Tennessee Public Service Company for power to be served from the line which the TVA constructed to the premises of Volunteer Portland Cement Company or extensions of it (1787).

[fol. 551] Mississippi Power & Light Company sold electricity to the government engineering project at Sardis, Mississippi, until the transmission line from Pontotoc, Mis-

issippi, to the project, over which TVA electricity is transmitted, was constructed (655).

(26½) TVA is in active competition with the several complainant companies to obtain not only the industrial business now being served by complainant companies, but also, the business of new industries entering the territory served by them.

[fol. 552]

X F

(27) All of the industrial and municipal customers now being served or under contract with TVA could be served by one or another of Complainant Companies (Miller 1690).

(28) All of the rural cooperative systems which have been constructed by TVA and are now distributing TVA power, could be served by one or another of the Complainant Companies without substantial change or addition in their existing transmission or substation facilities (Bonner 1299; Jacobs 1335; Perkins 1352; Watson 1372; Henkle 1477; Ostermueller 1262; Street 1217; Winkler 1408-1409).

X G

(29) The completion of the generating plants called for in the TVA Unified Plan and the marketing of the power generated thereby, will cause substantial damage to all the Complainants (Moreland 2927).

(30) The completion of the generating plants called for in the TVA Unified Plan and the marketing of the power generated thereby will result in three types of displacement of the Complainants' facilities:

(a) Permanent displacement of Complainants' distribution facilities in those areas where TVA power is actually distributed and also permanent displacement of transmission lines and substations immediately supplying such areas (Moreland 2931). For example, in the case of The Tennessee Electric Power Company, over one-third of its total [fol. 553] demand is represented by the City of Chattanooga (Miller 1691); the Company now has five high tension transmission lines serving the Chattanooga area (Miller 1689, 1692), and the loss of the business in Chattanooga will result in the destruction of over one-third of the usefulness of the Company's electric property (Miller 1691-2).

(b) Temporary displacement of Complainants' facilities of other kinds, either rendered temporarily idle or forced to operate at greatly reduced loading, which temporary displacement may be ultimately terminated by future growth of the remaining load of the utility system or may become permanent if TVA continues its expansion in any particular territory (Moreland 2931-2932).

(c) Impairment of the value of existing generating facilities and transmission lines through loss of the market for which they are adapted and were originally designed; and the incurrence of cost of additional transmission facilities which will be required in order to deliver power, from the generating plants whose natural market has so been taken, to the nearest market which may be available (Miller 1728, 1729).

(31) The construction and operation of rural distribution lines under TVA contracts results in substantial damage to the property and business of the Complainant Companies through whose territory such lines have been or may be constructed in the following respects:

(a) When distribution or transmission lines are projected they are constructed with a view of ultimately interconnecting with other existing lines to complete a loop in order to give two-way service and in order to control voltage and continuity of service. Where competitive systems are constructed in the same manner, such interconnections become impossible without extending service over territory already served by the competitive system (Miller 1696, 1702).

(b) The inability to develop normally because of the presence of the duplicating system results in less dependable and more expensive service (Miller 1703, 1704).

[fol. 554] (c) Expansion of both systems is made more expensive through the necessity of making cross-overs and through the necessity of extending lines through areas served by the competitor (Miller 1696, 1703; Bonner 1300; Perkins 1353; Watson 1370).

This damage is accentuated by the fact that in many instances the rural distribution lines of Membership Corporations distributing TVA power have been constructed in the immediate vicinity of the load centers now being served by Complainant Companies (Complainants' Ex. 332-A).

(32) The activities of TVA have already destroyed the credit of those Complainant Companies in whose territory the TVA is now operating (Frothingham 2447), and has substantially impaired the credit of all of the other Complainant Companies with the exception of the Appalachian Electric Power Company (Frothingham 2452-3). This has made it impossible for the companies in this area to take advantage of favorable credit conditions to refund existing indebtedness and thereby lower their fixed charges (Frothingham 2450). It has made it impossible for such companies to obtain new money for purposes of expansion (Frothingham 2446-2449).

[fol. 555]

XI

(1) With the exception of the Franklin Power & Light Company, which was not incorporated until 1929, and the Southern Tennessee Power Company, each of the complainant companies and their predecessors have grown and expanded their systems and organizations to meet the changing and growing economic needs of the territories which they respectively serve. At the time of the organization and commencement of operations of such complainant companies electricity was not generally used for industrial power purposes and it was necessary for the complainant companies to develop the market for the sale of electricity for use as industrial power (Stanley 1014-15). In so doing, through extensive research, sales and promotional activities, particularly in the case of the larger complainant companies, they have over a period of years, stimulated and promoted the industrial development of their respective territories and have assisted in the electrification of industry (Stanley 1015-16, 1022-23).

(2) Such complainant companies have also organized and developed large staffs of trained employes to collect data respecting the industrial advantages of their respective territories, to utilize this information in publicizing and advertising such advantages, and to promote the development of new industries in the areas served by them (Stanley 1017-18). As a result of these activities, such companies have assisted in locating many new industrial plants in the areas which they serve, representing an investment of many millions of dollars and the employment of thousands of [fol. 556] workers (Complainants' Ex. 182). These new

industries now constitute a very substantial part of the industrial power consumption served by such complainant companies (Stanley 1021-2).

(3) Such Complainant companies early began activities to develop and enlarge the residential use of electricity through extensive campaigns, fostering residential electrification and sale of domestic appliances (Stanley 1023-24). These activities have resulted in a large and progressive increase in the sale and use of electric appliances within the area served by such complainant companies (Complainants' Ex. 183). In carrying on this work of promoting domestic use of electricity, such complainant companies have developed and now maintain extensive sales and service departments (Stanley 1026).

(4) Such complainant companies have also made intensive studies of the problems and advantages of rural electrification; have constructed experimental rural lines as early as 1920, and since that time have been engaged in extensive activities in the development of rural electrification (Stanley 1027). These activities include educational programs showing the profitable use of electricity in agriculture, extensive experiments developing new uses of electricity on the farm, and constant investigation of possible rural line extensions into areas not yet served (Stanley 1027-1029 incl.). In carrying out these activities the companies maintain large staffs of agricultural engineers, home economists and salesmen (Stanley 1030, 1026). As a result of these activities a better understanding of the use of electricity on the farm [fol. 557] has been brought about which has resulted in the construction by the companies of thousands of miles of rural lines serving thousands of farmers, and in bringing electric service to hundreds of unserved rural communities (Stanley 1029, 1031, 1042; Complainants' Ex. 184).

(5) In the case of the larger complainant companies, which do not serve exclusively in metropolitan areas, each of such companies maintain a large field organization under the charge of district managers (1020, 1169-70, 1173, 1184, 1185). The field organization under each district manager is departmentalized to correspond with the departments in the central office organization (1185). Each of such district organizations has local offices responsible to the district manager (1185). These local and division

organizations cooperate with the central office organization in the company's activities in their respective territories (1186).

(6) The Complainant Companies as a group have developed to a high degree system planning. This involves an intimate contact and thorough knowledge of the operating history of the power system both physical and economic (2233, 2234), of plans of expansion both immediate and prospective of all major industrial users; of the growth of merchandise sales in domestic and commercial fields; of the expansion of rural service and of experiences gained in the operation and development of production and transmission facilities (Sporn 2238, 2239; Middlemiss 2334).

(7) The rates and services of each of the complainant companies in the states of Alabama, Tennessee, Kentucky, [fol. 558] Georgia, Virginia, West Virginia, North Carolina and South Carolina are regulated by State Commissions in the respective states (173, 174, 299, 308, 316, 331, 377, 408, 470, 511, 512, 1045). There is no State Commission in Mississippi and the rates and services of the complainant companies in that State are regulated by municipalities within their corporate limits (242, 663). The rates charged by the complainant companies have been reduced and changed from time to time by order of the governing State Commission (179, 1046, Complainants' Ex. 11). The rates charged by the several complainant companies in the states of Alabama, Tennessee, Georgia, Virginia, North Carolina and South Carolina are uniform for the different classes of service throughout their respective operating territories under regulations imposed by the various State Commissions (174, 177, 178, 377, 517).

(8) The Public Utilities Commissions in the States of Tennessee, Alabama, West Virginia and Kentucky have adopted regulations applicable to certain of the complainant companies fixing minimum requirements under which said companies may be required to extend their distribution facilities to give service to rural customers, or the Commissions have the power to compel the companies to extend their lines anywhere in the area to take care of any business justifying such extension (428-9, 1039-41, Complainants' Ex. 185).

(9) The Tennessee Valley Authority has not complied with the provisions of state laws applicable to public utility companies engaged in the electric power business, in any of the states where it is now operating and has not submitted to the regulation of the State Commissions in any of such states (Complainants' Exs. 322-5 inclusive).

[fol. 559] (9½) The competitive activities of TVA in making it impossible for the complainant companies to reduce their fixed charges through refinancing, and in making it impossible for them to procure new capital, interferes with and limits the power of the state regulatory bodies to require the complainant companies to reduce their rates and extend or improve their facilities and service.

(10) The carrying out of the Tennessee Valley program to take over the business and markets now served by the complainant companies will necessarily in the case of such complainant companies whose business and markets are so taken, destroy their ability to maintain the organizations which they have developed, their ability to perform the functions which they have heretofore, and which they are now performing, in providing adequate electric power service, and will destroy the ability of the states and political subdivisions in which such complainant companies are now operating, to regulate and control the electric power rates and service in such areas, or to protect the economic needs represented by industrial, commercial and domestic electric consumers who are now being served by such complainant companies.

[fol. 560] The Rural Electrification Administration (REA), the Federal Emergency Administration of Public Works (PWA) and Electric Home and Farm Authority, Inc., and Electric Home and Farm Authority (EHFA) have cooperated with and assisted TVA in the furtherance of its power program.

(a) TVA has a "very cooperative arrangement" with the Rural Electrification Administration (REA) for financing the construction of rural lines for municipalities and cooperatives (Complainants' Exhibit 116, pp. 485 and 614), and among other things representatives of REA have established offices in one of the TVA buildings in Knoxville, Tennessee (Supplement to December 7 session, p.

223); have attended organization meetings of cooperatives with representatives of TVA (Supplement A to December 7, p. 222); have assisted in preparing petitions for incorporation of cooperative associations (Supplement A to December 7 session, p. 221); have prepared by-laws for cooperative associations (Complainants' Exhibit 389); have attended meetings of the Board of Directors of cooperatives and rendered advice concerning availability of REA funds (Complainants' Exhibit 405); and TVA representatives have accompanied representatives of cooperatives to Washington to assist in the preparation of applications to REA for loans (Supplement A to December 7 session, p. 230).

(b) The Federal Emergency Administration of Public Works (PWA) has made contracts or allotments for loans totaling \$7,053,575.00 and grants totaling \$7,629,383.00 to 23 municipalities in the States of Alabama, Mississippi, and [fol. 561] Tennessee, in which complainant companies serve electricity, for the purpose of constructing a municipal electric distribution system to distribute TVA power in competition with the respective complainant companies serving electricity therein (Complainants' Exhibit 3 and 484).

(c) Many of the PWA applications are in form and substance identical (Complainants' Exs. 419, 420, 421, 423, 426, 430, 433, 436, 439, 442, 444 and 470, 474, 476, 478, 479), and specifically recite in some instances that the distribution system will duplicate and supplant a privately owned distribution system (Complainants' Exs. 421, 426, 430, 436, 439, 442 and 459); some recite that the amount of business contemplated and referred to therein is justified on the low promotional rates of TVA (Complainants' Exs. 419, 421, 426, 430, 436, 439, 442 and 444); some recite that the application is filed in cooperation with TVA to build up greater consumption of electrical energy (Complainants' Exs. 419, 421, 426, 444 and 459); some recite that the application is filed to take advantage of rates offered by TVA (Complainants' Exs. 419, 421, 423, 426, 439, 442, 444 and 459), and with few exceptions all applications state that the electricity to be distributed will be purchased from TVA.

(d) The loan and grant applications of the Cities of Hartselle, Russellville, Guntersville and Tarrant City, Alabama (Complainants' Exs. 430, 436, 439 and 442), severally re-

cite that the city has secured ten year written contracts from practically all electric consumers in the city. The form of contract, which is incorporated in each application, is identical and provides that in consideration of \$1 paid [fol. 562] by the Mayor of each City to the signer of the contract and in further consideration of the opportunity to secure lower electric rates, the signer of the contract will purchase his entire requirements of electrical energy from the City for a period of ten (10) years if, as, and when the City has electrical energy for sale, provided, the rates to be charged by the City shall be those prescribed by the Tennessee Valley Authority.

(e) In the Fall of 1933 the TVA Board granted Mr. Lilienthal the right to create a corporation under the laws of the State of Delaware with power to discount commercial paper to be obtained from manufacturers of electrical appliances licensed by the Authority. In December, 1933, Electric Home & Farm Authority, Inc., was created by executive order of the President and was chartered under the laws of Delaware in January, 1934. The directors of TVA were the directors of Electric Home and Farm Authority, Inc., and Mr. Lilienthal was president. That company made a contract with TVA (Ex. 581) as of July 1, 1934, whereby the purchasers of electric energy from the TVA might finance the purchase of electrical appliances through E. H. & F. A. Inc., and the TVA was to collect from such purchasers the monthly payments for such appliances and account therefor to E. H. & F. A., Inc. E. H. & F. A. Inc., was dissolved in August, 1935, and a new corporation, Electric Home & Farm Authority, was organized under the laws of the District of Columbia at or about said date, which new corporation succeeded to all the property, rights and liabilities of the original company, E. H. & F. A. Inc. The contract of July 1, 1934, is still in effect and the present corporation E. H. [fol. 563] & F. A. and Tennessee Valley Authority are still carrying on under said contract (Complainants' Exs. 569, 581, 599, 649).

[fol. 564] IN UNITED STATES DISTRICT COURT

(Caption omitted)

DEFENDANTS' SUGGESTED FINDINGS OF FACT AND CONCLUSIONS
OF LAW—Filed January 19, 1938

A final decree having been rendered in this cause on —
—, —, this Court now makes findings of fact and conclusions of law, respectively, pursuant to Equity Rule 70½ as follows:

Findings of Fact

Status of Projects of the Tennessee Valley Authority

1. The Tennessee Valley Authority has constructed, or has under construction, or has under investigation for construction a series of high dams and reservoirs, seven on the main stream of the Tennessee River and two on principal tributaries of the Tennessee, the Clinch, and the Hiwassee Rivers (Bowman, 3748-3845; def. exs. 36-53.)*

[fol. 565] Such high dams are the only possible projects to provide a nine-foot navigation channel on the Tennessee River and control destructive floods in the Tennessee and lower Mississippi River basins by means of dams in the Tennessee River system (Watkins, 3278, 3328-3329; Bowman, 3951-3952, 5726; Barker, 4739-4740; Clemens, 3615-3618; Kimball, 4280).

2. These dams when completed will provide a continuous nine-foot navigable channel with adequate overdepths for boats of nine-foot draft over the entire distance from the mouth of the Tennessee at Paducah, Kentucky, to Knoxville, Tennessee, a distance of approximately 650 miles (Putnam, 2014, 2029; Watkins, 3271, 3328-3329; Barker, 4625; def. ex. 98), will substantially alleviate the destructive floods in the Tennessee and Mississippi Valleys (Clemens, 3618; Floyd, 4414-4416; Kimball, 4217-4229), and will also create a substantial amount of water power (Wessenauer, 5454, 5492-5494; Watkins, 3298-3299).

3. Beginning at the mouth of the Tennessee River at Paducah, Kentucky, and extending upstream, the dams under

* Unless otherwise indicated, parenthetical references are to the transcript in this case.

control of the Authority already constructed, or under construction or active investigation for construction are as follows (Bowman, 3748-3845; def. exs. 38-53; comp. ex. 328, pp. 71-96):

Gilbertsville Dam, which is located in Kentucky 22.7 miles from the mouth of the river, and on which preliminary investigations by the Authority are in progress (def. exs. 38, 39; Bowman, 3751).

Pickwick Landing Dam, which is located in Tennessee 206.7 miles from the mouth of the river and which is under construction by the Authority and almost completed (def. exs. 40, 42).

[fol. 566] Wilson Dam, which is located at Muscle Shoals, Alabama, 259.4 miles from the mouth of the river, which was constructed by the United States Army Engineers and transferred to the Authority under the Tennessee Valley Authority Act, and which is now in operation.

Wheeler Dam, which is located in Alabama 15.5 miles above Wilson Dam and 274.9 miles from the mouth of the river (def. ex. 43) and construction of which was commenced by the United States Army Engineers, completed by the Tennessee Valley Authority, and which is now in operation (Bowman, 3971-3972; Putnam, 1969; Crane, 2316).

Guntersville Dam which is located near Guntersville, Alabama, 349 miles from the mouth of the river and which is under construction by the Authority (def. exs. 44, 45, 45-A).

Chickamauga Dam, which is located near Chattanooga, Tennessee, 471 miles from the mouth of the river and which is under construction by the Authority (def. exs. 46, 46-A).

Watts Bar Dam, which is located in Tennessee 529.9 miles from the mouth of the river and on which preliminary investigations by the Authority are in progress (def. ex. 47).

Coulter Shoals Dam, which is located in Tennessee 602 miles from the mouth of the river and on which preliminary investigations by the Authority are in progress (def. ex. 48).

The dams constructed or under construction on tributaries are as follows:

Norris Dam, located in Tennessee on the Clinch River 79.8 miles from the mouth of that river and 647.5 miles from the mouth of the Tennessee River, constructed by

[fol. 567] the Authority, now completed and in operation (def. exs. 49, 51).

Hiwassee Dam, located in North Carolina on the Hiwassee River 75.8 miles from the mouth of that river and 560.3 miles from the mouth of the Tennessee River, under construction by the Authority (def. exs. 50, 52).

The Tennessee Valley Authority has also recommended to the Congress the future construction of a third tributary project at the Fontana Dam site in North Carolina on the Little Tennessee River, but the Congress has appropriated no funds for this purpose, and neither construction nor preliminary investigation or other work is in progress on this project (Bowman, 3752).

4. Each of the dam projects of the Authority is located on a site at or near the site selected by the United States Army Engineers in their comprehensive report on the Tennessee River system set forth in House Document No. 328, Seventy-first Congress, second session (Watkins 3307; Bowman, 3952; Barker, 4624-4625; Crane, 2313, 2314; comp. ex. 105, p. 43, table B). The dams of the Authority are the type of projects described in that report as best adapted for the comprehensive development of the Tennessee River system for navigation, flood control, and conservation of the water-power resources (Watkins, 3296-3299, 3306, 3416, 3517; comp. ex. 105, pp. 4-7, 42). The projects so described in that report were designed primarily for navigation and flood control (Watkins, 3305-3306, 3549). Prior to the passage of the Tennessee Valley Authority Act, the United [fol. 568] States Army Engineers, in fact, had plans for a high dam at the site of the present Wheeler Dam. Their design made provision for intakes for the later installation of power facilities. Prior to passage of the Tennessee Valley Authority Act, they had commenced construction of the lock for this project. The lock and dam as completed by the Authority are substantially similar in design to the project as designed by the Army Engineers (Bowman, 3971-3972; Putnam, 1969; Crane, 2316).

5. Each of the projects of the Authority has all elements of design reasonably required for navigation and flood control in accordance with accepted engineering standards (Watkins, 3307; Bowman, 3951). Each of the projects has been designed to provide storage capacity for a slackwater

pool behind the dam and a substantial additional storage capacity above the slackwater pool level (Bowman, 5699-5700). Each of the main-stream projects is equipped with a lock prescribed and designed by the Corps of Engineers, with space for an additional parallel lock when commerce warrants (Barker, 4630, 4700-4705; def. exs. 111, 112). The locks which are being installed are of sufficient size and capacity to accommodate adequately the traffic which may be expected in the reasonably near future (comp. ex. 105, p. 6; Putnam, 1971-1972, 1995, 2029-2030). To provide effective means for flood control and stream-flow regulation, each of the projects is equipped with large spillway gates, and in addition, the tributary projects are equipped with sluiceways of large capacity (Bowman, 5701-5708, 5771). At [fol. 569] each of the projects facilities have been provided or construction and design are such that facilities may be provided for the generation of power (Bowman, 3748-3845). Each of the projects of the Authority can be operated to secure substantial benefits in the improvement of navigation and the control of destructive floods, and, consistently therewith, the production of electric energy (Watkins, 3298-3299; Wessenauer, 5454, 5492-5494; Crane, 2319-2320; Sargent, 3707-3708, 3726).

6. The following tables set forth the principal engineering features of the projects of the Authority, Lock and Dam No. 1 constructed by and under the control of the War Department, and the privately-owned Hales Bar Dam:

Project	(2) Miles above River Mouth	(3) Drainage Area Sq. Mi.	(4) Length of Res. Miles	(5) Elev. Top of Gates	(6) Normal Pool Level	(7) Low Pool Level at Dam	(8) Low Pool Level at Dam Updr.	(9) Reservoir Volumes acre-feet		(11) Flood Control
								Total to Top of Gates	Low Water Regulation	
Gilbertsville.....	22.7	40,000	184.0	375	359	350	354	6,150,000	750,000	4,600,000
Pickwick.....	206.7	32,870	52.7	418	413	408	408	1,032,000	191,000	416,000
Lock & Dam No. 1.....	256.8			416	416					
Wilson.....	256.4	30,800	15.5	505.8	505.1	503	503	600,000	43,000	43,000
Wheeler.....	274.9	26,600	74.1	556	555	548	550	1,100,000	280,000	440,000
Guntersville.....	349.0	24,300	82.1	595	594	591	593	951,000	62,000	242,000
Hales Bar.....	431.1	21,800	39.9	629.2	626.2			100,000		
Chickamauga.....	471.0	20,800	58.9	685.0	682.0	673.5	675	639,000	196,000	325,000
Watts Bar.....	529.9	17,460	72.1	745	740	736	736	1,132,000	140,000	337,000
Coulter Shoals.....	602.0	9,600	50.0	815	810	805	805	370,000	60,000	140,000
Norris.....	79.8	2,950	71-Cl. 52-Po.	1034	1020	955		2,567,000	1,500,000	2,020,000
Hilwaasee.....	647.5 75.8 576.3	977		1526	1526	1415		435,000	362,000	362,000
								Total.....	4,034,000	8,925,000
								Tributary.....	1,862,000	2,382,000
								Main River.....	2,172,000	6,543,000

Col. (7) is the lowest elevation to which the reservoir will usually be drawn for flood control and, at the main-stream dam, is the usual allowable drawdown with normal wet season flow to give the elevation shown in col. (8) at the next dam upstream, resulting in a minimum navigable depth of 9 feet, with 2 feet over-depth. This elevation is sometimes also referred to as "minimum drawdown elevation" or "minimum navigation level" or "maximum drawdown."

Col. (10) is the difference in the volumes for elevations in columns (6) and (8).

Col. (11) is the difference in the volumes for elevations in columns (5) and (7).

Normal pool level in column (6) is an arbitrary level generally defining the maximum level to which the pool will be raised in low-water season except for possibly a temporary rise of one foot above this caused by malarial control fluctuations.

The information shown in this table appears in Defendants' Exhibits 36, 38, 39, 40, 42, 43, 44, 45, 45a, 46, 46a, 47, 48, 50, 51, 52, 53 and 54, and in Complainants' Exhibit 328.

[fol. 571]	Project	Elev. Spillway Crest	Number & Size Spillway Gates	Spillway Disch. Capacity c. f. s.	Elev. Lower Lock Sill	Elev. Upper Lock Sill	Size of Lock Chamber Feet	Power Units Installed or Authorized	Ultimate Power Units Provided For
	Gilbertsville.....	330	24-45 x 40	850,000			110 x 600		6-32,000 KW
	Pickwick.....	378	22-40 x 40	820,000	342.2	398.0	110 x 600	2-36,000 KW	6-36,000 KW
	Lock & Dam No. 1.....	416			394.1	406.6	60 x 300		
	Wilson.....	487	58-18 x 38	629,000			60 x 300	4-20,000 KW	4-20,000 KW*
	Wheeler.....	541	60-15 x 40	987,000	491.0	534.0	60 x 300	4-26,000 KW	14-26,000 KW*
	Guntersville.....	545	18-40 x 40	625,000	538.0	578.0	60 x 360	4-32,000 KW	6-32,000 KW
	Hales Bar.....	626.2	Flash boards 3 ft. high				60 x 360	3-24,000 KW	4-28,000 KW
	Chickamauga.....	655	20-40 x 40	600,000	618.2	663.0	60 x 287		
	Watts Bar.....	720	21-25 x 40				60 x 360	3-27,000 KW	4-27,000 KW
	Coulter Shoals.....	790	20-25 x 40				60 x 360		4-37,500 KW
	Norris.....	1020	3-14 x 100	205,000				2-50,000 KW	3-20,000 KW
	Hiwassee.....	1503.5	7-23 x 32	130,000				1-60,000 KW	2-60,000 KW

(The information shown in this table appears in defendants' exhibits 39, 42, 43, 45, 46, 47, 48, 51, 52, 116, and 153, except for the lock sill elevations, which appear in the transcript, Barker, 4967-4968, 4871-4873.)

* Provision for the ultimate installation of all these units was made by the United States Army Engineers in Wilson Dam as originally constructed. The dam as completed by them included the completed power house, with eight generating units installed and provision made for installation of the additional ten generating units (comp. ex. 105 (H. Doc. 328) pp. 36, 88; ex. 116, p. 433).

[fol. 572] 7. The engineers of the Authority in responsible charge have determined, on the basis of a study of all available records (Woodward, 4034; Kimball, 4276, 4279-4280, 4380-4381) upon a method of operation for the Authority's projects which in their opinion is the most effective method of operation for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River Valleys. This is the method of operation which in their opinion is best adapted for the combined purposes of improvement of navigation and the control of destructive floods without reduction in the effectiveness of the Authority's projects for either navigation or flood control (Woodward, 3994, 4007-4008, 4014, 4016-4019, 4039, 4157-4158; Kimball, 4276, 4278-4280, 4381). The general method of operation is set forth in the report of the Board of Directors of the Tennessee Valley Authority entitled, "The Unified Development of the Tennessee River System," pages 18-19, which is complainants' exhibit 528 in this case. Some details of operation have been changed in the past, and according to the Authority's engineers in responsible charge, other changes may be necessary in the future as further investigation and experience may require (Woodward, 4007, 4037; Wessenauer, 5495).

8. The engineers of the Tennessee Valley Authority in responsible charge operate the projects of the Authority substantially as follows: The reservoir levels of the main-stream dams below Chattanooga are held somewhat above low pool level during the flood season and drawn down to or below such level in advance of a flood; those above Chattanooga [fol. 573] are to be held at about low pool level during flood season (Woodward, 4014, 4016-4018; Kimball, 4276; Wessenauer, 5446). As the flood season draws to a close, about the beginning of April, reservoir levels on the main stream are allowed to rise (Woodward, 4019; Kimball, 4278). The reservoir levels of the tributary projects are maintained at about low pool level at the beginning of the flood season, and a substantial portion of the storage capacity below so-called normal pool level is gradually filled during and after the flood season. A sufficient capacity is held available at the close of the flood season to control the largest run-off that may be expected at that time (Woodward, 4032-4034; Kimball, 4278-4279; Wessenauer, 5443-5446). The water stored in the reservoirs on the tribu-

taries and the main stream is released during the low-water season to augment the low-water flow (Woodward, 4019, 4022; Barker, 4628; comp. ex. 328. pp. 18-19).

9. The general method of operation set forth in finding 8 conforms to the method of operation for navigation and for flood control contemplated in House Document 328 and House Document 259 (comp. ex. 105, par. 31, pp. 63-64, par. 41, p. 71, par. 46, p. 74, par. 77, p. 95; Clemens, 3629, 3632-3633, 3635-3637) and is reasonably calculated to provide most effectively for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River Valleys without reduction in the effectiveness of the Authority's projects for either flood control or navigation (Woodward, 4014, 4016-4018, 4039, 4157; Kimball, 4276, 4278-4280, 4380-4381; Clemens, 3606, 3615, 3633; Kelly, 2604-[fol. 574] 2606, 2611; Floyd, 4416-4419, 4421-4425, 4441-4442; Sargent, 3695-3697, 3700, 3707-3708; Crane, 2319; Bowman, 3890, 3891, 3899; Barker, 4665; Watkins, 3293-3294, 3298, 3350, 3353-3355).

10. While dams and reservoirs of limited capacity, designed for local flood protection only, should, according to some engineering opinion, be kept empty in advance of floods and emptied immediately after floods, these principles govern the design and method of operation of dams and reservoirs established for local protection alone and do not apply to the projects of the Tennessee Valley Authority, which are designed and operated for the protection of points on the Tennessee, the lower Ohio, and the lower Mississippi, and for navigation, as well as for local flood protection (Watkins, 3293-3294; Kimball, 4379-4380; Woodward, 4021, 4031-4032, 4043; Kelly, 2604-2606, cf. 2602; Floyd, 4424-4425).

Status of Navigation on the Tennessee River

11. The Tennessee River, a navigable river approximately 652 miles long, is formed by the junction of the French Broad River and the Holston River at Knoxville, Tennessee, and enters the Ohio River near Paducah, Kentucky. In its unimproved state there were numerous obstacles to commercial navigation, including shoals and bars, steep slopes, high velocities, and floods in many months of the year, and inadequate depths in a great proportion of

the river (Watkins, 3312-3313; Barker, 4604-4606; def. exs. 93, 94).

[fol. 575] 12. The problem of improving navigation on the Tennessee River has been a matter of national concern for more than a hundred years (Barker, 4588). From 1852 to 1933 Congress authorized and made appropriations for numerous navigation surveys and navigation projects covering all portions of the Tennessee River and certain of its tributaries, at a total expenditure of approximately \$18,000,000, exclusive of Wilson Dam (def. ex. 95; Barker, 4605).

13. Prior to the passage of the Tennessee Valley Authority Act, the Tennessee River was not adequately improved for modern commercial navigation except for short stretches behind the Government-owned Dam No. 1 and Wilson Dam, and the privately owned Hales Bar Dam. The controlling depth of the river at that time ranged from $4\frac{1}{2}$ feet in the lower part of the river to 1 foot in the upper section (def. ex. 97; Barker, 4617, 4623).

14. The Tennessee River, as a tributary of the Ohio River is interconnected with the inland waterway system of the Mississippi River, which connects the Gulf and the Great Lakes and taps the territory of about 15 States, including many important traffic-producing industrial, commercial, and agricultural centers, and extends as far east as Pittsburgh, Pennsylvania, as far west as Kansas City, Missouri, and as far north as Minneapolis and St. Paul, Minnesota. Interstate railroads and highways interconnect with the waterway at numerous points, permitting joint land and water transportation (Alldredge, 4951-4961; def. exs. 116, 118, 123; Barker, 4732-4736). There are varied and substantial agricultural, mineral, and forest resources located in the Tennessee Valley within reach of the waterway (Alldredge, [fol. 576] 4966-4977; def. exs. 120, 121, 122). About 18.2 percent of the population of the United States, based on the 1930 census, is located within 25 miles of the banks of this interconnected waterway (Alldredge, 4963-4964; def. ex. 119). This inland waterway system includes 5700 miles of improved waterway of 9-foot depth or over, an additional 3200 miles of 6 to 9-foot depth, and an additional 1000 miles of 4 to 6-foot depth (Barker, 5065; def. ex. 116).

15. The dams constructed, under construction, or authorized for construction or investigation by the Tennessee Valley Authority will provide a navigation channel throughout the length of the Tennessee River substantially superior to that which could be provided by any alternative method of navigation improvement (Watkins, 3306, 3416, 3517; Barker, 4666; comp. ex. 105, pp. 4-7; Putnam, 1976; Brodie, 4916-4919). They will also provide substantial navigation improvement on a number of the tributaries of the Tennessee River (Barker, 4654) and will provide an increased water supply, which will substantially improve navigation on the Mississippi River in the low-water season (Barker, 4651, 4653-4654; Watkins, 3300-3301, 3554-3555; Brodie, 4910-4912).

16. Each of the dams constructed, under construction, or authorized for construction or investigation by the Tennessee Valley Authority will result in a substantial improvement for navigation (Bowman, 3770, 3787-3788, 3790-3795, 3801, 3804, 3750; def. exs. 47, 48; Barker, 4651-4654; Putnam, 2012-2015).

[fol. 577] 17. The high-dam projects of the Authority will provide a navigation improvement substantially superior to that which could be provided by the system of low dams set forth in House Document No. 328. The superiority of high dams for navigation was recognized by the Board of Engineers for Rivers and Harbors in House Document No. 328 (Watkins, 3415-3416, 3517; comp. ex. 105, pp. 4-7, 12). The Authority's projects will provide superior channel depths and widths (Watkins, 3271; Barker, 4666-4667, 4709-4715; def. exs. 104, 107, 108), substantially fewer lockages (Barker, 4722-4724; def. exs. 104, 105, 115; Watkins, 3271; Putnam, 1929-1930, 1985-1986), substantially less current velocities (Barker, 4723-4724; def. exs. 104, 106, 115; Watkins, 3273-3274), pool fluctuations (Barker, 4688-4695; def. ex. 110), and interruptions from floods (Barker, 4666-4667, def. ex. 104). The elimination of lockages will substantially reduce the time consumed in lockages (Brodie, 4898-4899; Barker, 4722-4724; Putnam, 1929-1930, 1985-1986; Willson, 2636); the superiority of channel depths and reduction of current velocities will substantially increase the speed of movement and reduce the amount of motive power required (Barker, 4672, 4722-4724; def. ex. 115; Brodie, 4899-4900, 4904-4905; Watkins, 3271-3272); and the wider and

longer pools of the high dams are preferred by the navigator to the narrow, crooked pools of the low dams (Brodie, 4895, 4899-4919; Barker, 4696-4698, 4715-4717; Watkins, 3274-3275, 3505-3506). The reduction in pool fluctuations will greatly encourage the development of terminal facilities necessary to the development of commercial navigation (Brodie, 4905-4906; Barker, 4688-4695; Watkins, 3519-3521). [fol. 578] The advantages of the Authority's projects in these respects will insure a substantially greater efficiency of the navigation channel, substantially greater dependability of service, and may reasonably be expected to attract a substantially greater volume of traffic on the improved river (Brodie, 4914-4915; Watkins, 3326). The high dams will also provide substantial improvement of navigation on the tributaries which would not be provided by the low-dam projects (Barker, 4666-4667; def. ex. 109; Watkins, 3279, 3300). The advantages of high dams cannot be accurately measured in monetary terms (Brodie, 4935-4936; Putnam, 2010-2011). The boats and barges which are now in general use on the interconnected inland waterways of the Mississippi River system will be able to navigate the Tennessee River, where improved by the projects of the Authority, without change of design or extent of loading (Brodie, 4895-4898; Barker, 4715-4717; 4736-4737; 4859-4860).

18. On other tributaries of the Mississippi, the United States Army Engineers are now replacing low dams with high dams, with provision for the development of power (Putnam, 1974-1977; H. Doc. 306, 74th Cong., 1936, p. 2, 1976; Watkins, 3276), and at the time of the creation of the Tennessee Valley Authority they were engaged in the construction of a lock for a high navigation dam at the Wheeler Dam site with provision in their design for the development of power (Bowman, 3971-3972; Putnam, 1969; Crane, 2316).

19. The improved navigation channel provided by the projects of the Authority will cause a very substantial increase and development in waterway traffic between the [fol. 579] Tennessee Valley region and other regions of the United States connected by water, rail, and highway (Barker, 4738; Brodie, 4914; Watkins, 3318, 3322-3323). Despite the numerous obstacles in the past to commercial navigation on the Tennessee River, the traffic on the river over the last forty years has been between one million and

two million tons annually, but due to lack of adequate depths the traffic has consisted largely of short hauls (def. ex. 96; comp. ex. 105; H. Doc. 328, pp. 205-233; Watkins, 1310-1314; Barker, 4617; Putnam, 1931, 1936-1937). It was estimated by the Army Engineers in House Document No. 328 that there would be an increase of traffic of approximately seven million tons per annum at a saving of about ten million dollars annually (or a saving of approximately 25 per cent of the present freight charges) if the Tennessee River were adequately improved for commercial navigation (comp. ex. 105, p. 497; Alldredge, 4999-5011; def. cxs. 126, 128). Subsequent studies since the creation of the Tennessee Valley Authority have confirmed the reasonableness and conservative character of this estimate (Alldredge, 4999-5000, 5011, 5012). On the basis of the growth of traffic experienced on the comparable improved waterways of the interconnected Mississippi River system it is reasonable to expect an ever increasing growth in the volume of traffic on the river (Alldredge, 5014; Watkins, 3322-3323).

20. The value of the improvement to navigation provided by the projects of the Authority is not limited to the reduction [fol. 580] in the cost of transportation to shippers, but includes substantial intangible values such as the stimulation of the growth of industry and business and the promotion of the general prosperity of the region within the influence of the improved waterway (Putnam, 2010-2011; Alldredge, 5020; Watkins, 3320).

The Flood Problem on the Tennessee and Mississippi Rivers

21. The recurrent great floods on the Tennessee and Mississippi Rivers have long presented a grave flood menace of national importance. Thousands of miles of interstate railways and highways, and twenty million acres of the richest cotton lands in the United States, the products of which are normally marketed in interstate and foreign commerce, lie within the flood plain of the Mississippi Valley. Located in the path of Mississippi floods also are the important commercial cities of Memphis, Cairo, and New Orleans, and other smaller communities, in which are located large cotton warehousing, compressing, and processing plants, and woodworking plants, engaged in the production, processing, and distribution of goods normally marketed in interstate and foreign commerce. The city of Chattanooga,

which is the principal point of danger on the Tennessee River, is an important center of interstate railways and highways and manufacturing plants, and is a principal center for the distribution throughout the southeastern region of commodities produced in other States (Okey, 4450-4473, 4521-4524; Watkins, 3326-3328; Kimball, 4187-4207; Kurtz, 2041-2062, 2176; comp. ex. 349).

22. The great floods of the past on the Tennessee and Mississippi Rivers have caused and, unless controlled in the future, will cause complete interruption of transportation on the Mississippi and Tennessee Rivers, and complete interruption of interstate commerce on the railroads and highways, as well as interruption in the production, manufacture, and distribution of products normally marketed in interstate and foreign commerce, and substantial damage to the facilities and properties employed for these purposes (Okey, 4450-4473, 4521-4524; Kurtz, 2051-2062, 2176; Watkins, 3328; comp. ex. 105, pp. 730-734).

23. For the most effective control of destructive floods in the Tennessee River basin, particularly in the critical area at Chattanooga, Tennessee, it is desirable to provide high dams with controlled storage (such as the projects of the Authority) on the main stream of the Tennessee and on the principal tributaries above Chattanooga, including the Clinch and Hiwassee Rivers, in order to supplement local protective works (Kimball, 4210; comp. ex. 328, pp. 19-20).

24. The Ohio River and its tributaries, including the Tennessee River, are the largest contributor to all Mississippi floods, contributing from 52 per cent to 90 per cent of the floods between Cairo and Helena, Arkansas (Clemens, 3564-3565; Kelly, 2588). The Tennessee River has always made a substantial contribution to all Mississippi floods (Clemens, 3604).

25. The existing flood-protection works on the lower Mississippi River, consisting of levees supplemented by floodways and cut-offs, are inadequate to pass a flood such as is now estimated to be reasonably probable in the future without disastrous overtopping the existing levees (def. ex. 32, pp. 16, 27; Kelly, 2585-2586; Clemens, 3587-3591; Okey, [fol. 582] 4489-4491). Even in lesser floods the existing projects provide adequate protection for only 60 per cent of the alluvial valley, (Okey, 4489) and then only with the

use of the floodways, the use of which it is desirable to eliminate whenever possible (def. ex. 32, p. 8; Clemens, 3580-3583; 3602; Okey, 4555-4557). The levees on the lower Mississippi have reached the practical limits of height (Kelly, 2586-2588; Clemens, 3591; Okey, 4558). Any additional protection against lower-Mississippi floods must be found in part in the provision of reservoirs on the tributaries of the Mississippi to reduce their contribution to Mississippi floods (Kelly, 2585-2586; Clemens, 3591-3592). For the most effective flood control use, reservoirs should be located close to Cairo, which is at the junction of the Ohio and the Mississippi Rivers (def. ex. 32, par. 22; Clemens, 3601-3602; Kelly, 2592-2593).

26. The Tennessee River, being the largest tributary of the Ohio and closer to Cairo and the lower Mississippi than any other major tributary of the Ohio system, is one of the best rivers for reservoirs for flood control on the lower Mississippi (Clemens, 3601-3602; Floyd, 4415). For the most effective reduction of the contribution of the Tennessee River system to Mississippi floods, it is necessary to provide high dams with controlled storage (such as the projects of the Authority) on the mainstream and storage dams on the tributaries, including the Clinch and Hiwassee Rivers (Clemens, 3606-3607; Kimball, 4220).

27. The season of major floods in the Tennessee River basin is limited to the period from approximately the middle [fol. 583] of December to about the first of April. No major flood of record has occurred in the Tennessee basin outside this period; floods occurring outside this flood season are of limited volume and duration, and are local in effect (Kurtz, 2192; Woodward, 4033-4035). The season of major floods on the lower Ohio and lower Mississippi lasts about a month later than the flood season on the Tennessee, (Clemens, 3651) but as the end of the Tennessee flood season approaches, the need for storage capacity to control the contribution of the Tennessee to Ohio and Mississippi floods diminishes (Kimball, 4278).

28. If the projects of the Authority, described in finding 2, had been in operation during past floods since 1897, they could have reduced the height of all major Mississippi floods since that date by two feet or more from Cairo, Illinois, at least to Helena, Arkansas (Kelly, 2595, 2588; Kim-

ball, 4221-4223; Clemens, 3604-3606; Okey, 4561-4562). It is reasonable to expect that these projects will make possible a reduction similar in extent in all probable floods in the future on the lower Mississippi (Kimball, 4222; Clemens, 3606). Such reduction will provide substantial additional flood protection for the lower Mississippi, a substantial safety factor for the levee system, reduce the frequency of the use of floodways and the flooding of backwater areas, and will be of substantial value in the control of destructive floods in the lower Mississippi (Okey, 4506-4513; Kimball, 4222; Clemens, 3604; comp. ex. 328, p. 19).

The projects of the Authority, described in finding 2, if in operation during past floods in the Tennessee River basin, could have eliminated or substantially reduced all [fol. 584] past floods at Chattanooga for which the available records are adequate to make reliable estimates of possible reduction and will reduce or eliminate all moderate floods of the future (Kimball, 4210, 4214; def. ex. 82) and will control the contribution of the Hiwassee and Clinch Rivers to all future floods at Chattanooga (Kimball, 4208). The Authority's projects, in combination with one reservoir on the Little Tennessee, one on the Holston, and one on the French Broad Rivers would sufficiently reduce the magnitude of all probable future floods so as to make feasible the construction of the necessary local protection works by the city of Chattanooga. Such reductions will be of substantial value in the control of floods in the Tennessee Valley (Kimball, 4214; comp. ex. 328; pp. 19-20, 23). There appears to be no system of reservoirs sufficient to eliminate the flood menace in the Tennessee basin except in combination with local protective works (Kimball, 4207-4214, comp. ex. 328, p. 19, cf. Kurtz, 2082; comp. ex. 356).

29. Each of the projects of the Authority is of substantial value for the reduction of destructive flood heights in the Tennessee and Mississippi River basins (Woodward, 4018-4019; Kimball, 4220-4221; Floyd, 4418; Kurtz, 2190-2191; Watkins, 3278-3279, 3300; def. ex. 151-152; Clemens, 3606-3607).

30. The controlled-storage projects of the Authority are the only types of engineering works on the Tennessee River system which will afford effective flood control in both the Tennessee and Mississippi River basins. Automatic uncontrolled detention reservoirs are of uncertain value for

local Tennessee flood control (Kimball, 4262, 4275) and would be of no value for the control of floods on the lower [fol. 585] Mississippi (Kurtz, 2071; Clements, 3617; Kimball, 4255). The so-called natural valley storage in the Tennessee River basin is the space occupied by the flood itself, and the retarding effect of such uncontrolled valley storage may increase the danger of Mississippi floods (Kelly, 2608-2610; Clemens, 3607-3615; Kimball, 4223-4231). The low dams set forth in House Document No. 328 would be of no value in the control of destructive floods either in the Tennessee or Mississippi River basins as was recognized in House Document No. 328 (comp. ex. 105, p. 64; Clemens, 3607).

Necessity for Federal Action

31. Pursuant to congressional authorization, a comprehensive survey of the Tennessee River system with respect to navigation, flood control, and conservation of power resources was undertaken by the Corps of Engineers of the War Department and completed in 1930. This report is contained in House Document No. 328, Seventy-first Congress, second session (comp. ex. 105). The recommendations contained in this report were adopted by Congress in the Rivers and Harbors Act of 1930 and provide for the creation of a nine-foot navigation channel throughout the length of the Tennessee River by a series of low dams to be constructed by the Federal Government or a series of high dams to be constructed by private interests in co-operation with the Federal Government (comp. ex. 105, p. 5). In 1935 the Mississippi River Commission, in a comprehensive report on reservoir projects for Mississippi flood control, set forth in House Document No. 259, Seventy-fourth Congress, first session, recommended that the Federal Government adopt a policy of encouraging the [fol. 586] construction of reservoirs on the tributaries of the Mississippi River for increased flood protection on the lower Mississippi (def. ex. 32, p. 33). In April 1937 the Chief of Engineers, in a report set forth in Committee Document No. 1, Seventy-fifth Congress, first session, recommended the construction by the Federal Government of storage reservoirs on the tributaries of the Mississippi as essential for the control of floods on the lower Mississippi (Kelly, 2585-2586). Neither at the time of the enactment of the Tennessee Valley Authority Act nor since has there

been any reasonable prospect that a comprehensive development of the Tennessee River and its tributaries for the combined purpose of navigation and flood control in the Tennessee and Mississippi River basins could be obtained in any other way except by the construction of high dams by the United States Government or some agency thereof (Watkins, 3284-3287, 3331; Longley, 1195-1196).

Combined Benefits to Navigation and Flood Control from the Tennessee Valley Authority Projects

32. The projects of the Authority will permit the maintenance at all times of the nine-foot channel on the main stream of the Tennessee with sufficient overdepths to accommodate boats of nine-foot draft (Watkins, 3271, 3328-3329; Barker, 4625, def. ex. 98; Putnam, 2014, 2029). The tributary projects on the Clinch and Hiwassee Rivers will also permit the maintenance of slackwater pools in the lower portions of the reservoirs, which is necessary on the Clinch, a navigable tributary, in order to preserve existing navigation and to avoid foreclosing future improvement for navigation (Watkins, 3288; Barker, 4654), and is valuable on both tributaries in order to preserve the life of [fol. 587] the projects by affording capacity for the deposit of silt (Watkins, 3291-3292; Barker, 4652-4653). The projects of the Authority will also provide substantial storage space above slackwater pool level to control in whole or in part the run-off from the drainage area above the dams during the flood season (Watkins, 3281, 3303, 3549; Bowman, 5718). Such projects are the only engineering works which can provide effective flood control in conjunction with the continuous maintenance of the nine-foot channel for navigation.

33. The tributary projects of the Authority, by reducing flood flows and increasing low flows, will substantially increase the effectiveness of the high dams on the main stream for the reduction of flood heights on the Mississippi and Tennessee Rivers in combination with the maintenance of a nine-foot navigation channel (Floyd, 4418-4422; Barker, 4800-4801; Kimball, 4208-4209; 4220; Clemens, 3606-3607). These tributary reservoirs will also serve to increase materially the navigable depths in the unimproved portions of the main stream for navigation, will substantially increase the navigable depths in the upper

ends of the navigation pools created by the main-stream projects, and will substantially increase the navigable depths on the lower Mississippi River which increases will be of material benefit to navigation (Barker, 4650-4654; Watkins, 3300-3301, 3554-3555; Brodie, 4910-4912).

34. The low-dam plan recommended in House Document No. 328 as an alternative navigation project would have no flood-control value (comp. ex. 105, p. 64; Clemens, 3607). The low-dam plan in conjunction with detention reservoirs on the tributaries might together accomplish navigation improvement and flood control on the Tennessee River, but this combination would contribute nothing to flood control [fol. 588] in the Mississippi River (Kurtz, 2071), might aggravate flood conditions there (Clemens, 3617; Kimball, 4255), and would provide navigation improvement inferior to that provided by the projects of the Authority (Barker, 4666; Brodie, 4916-4919; Watkins, 3271, 3275).

35. Upon the completion of the construction of the Pickwick Landing project and the Gunter'sville project, these two projects, in conjunction with the already completed Wheeler Dam and the previously existing Wilson Dam, will provide a nine-foot channel from Pickwick Landing to the vicinity of Chattanooga, a distance of approximately 257 miles (Barker, 4628). The completed Norris Dam is being operated to provide a navigation channel of seven-foot minimum depth in the 207-mile stretch between Pickwick Landing and the mouth of the Tennessee River (Barker, 4628-4629, 4647). This seven-foot depth below Pickwick will be increased to seven and one-half feet upon completion of Hiwassee (Barker, 4628). These projects, together, will provide a commercially feasible navigation channel between Chattanooga, Tennessee, and the inland waterway system (Barker, 4629). For the larger part of each year there will be a through navigation channel of nine-foot depth from Chattanooga to the mouth of the river (Barker, 4629, 4800), and even prior to construction of Gilbertsville, by means of a moderate amount of dredging and releases from other projects of the Authority, it is feasible to provide a permanent nine-foot channel below Pickwick Dam (Putnam, 5888-5891). Until the Gilbertsville project is constructed, which may not be for many years, it is necessary to store a substantial amount of water in the tributary [fol. 589] reservoirs during the high-water season to pro-

vide the low-water releases required for this improvement to navigation (Barker, 4795).

36. The increase of the low-water flow by means of the storage of water during the high-water season at Norris Dam and the release of such water during the low-water period has increased and will substantially increase the continuous water power available at Wilson Dam and will increase the value of Wilson Dam for all purposes (Wessenauer, 5467; Bowman, 5735; Thomas, 5195-5196).

37. Since completion, Norris Dam has been successfully operated to improve substantially the navigation channel of the Tennessee River between Wilson Dam and its mouth (Woodward, 4009-4011; Barker, 4649), to prevent a probable flood at Chattanooga in the year 1936, and to hold off from the peak of the Mississippi River flood of 1937 approximately 28,000 c.f.s., the Norris Dam storing the entire flow of the Clinch River for six weeks during the 1937 Mississippi flood (Woodward, 4036, 4109; Kimball, 4384; def. ex. 82).

38. The operation of Norris Dam since its completion has also increased the amount of water power available in the low-flow season at the existing Government-owned Wilson Dam (Wessenauer, 5467; Bowman, 5735; def. ex. 142, p. 3), but the operation of holding and releasing waters has been directed primarily to navigation and flood control and the protection of construction works below (Woodward, 4007; 4009-4011; Kimball, 4382-4384). The same is true of Wheeler Dam, which has been operated since its completion in 1936 to maintain a nine-foot navigation channel 74 miles to the site of the Guntersville project and to reduce flood waters and protect construction works at [fol. 590] the Pickwick project (Woodward, 4007-4008, 4017-4019, 4109-4110; Bowman, 3749, 3789-3790; def. ex. 43). Approximately 85 percent of the water released from Norris during the year 1937 was of benefit only to navigation and flood control, and was not required or useful for production of power (Karr, 5522-5523; def. ex. 142, sheet 2, col. 3, sheet 3, last column; Woodward 4075). The temporary storage and releases of water for power-peaking purposes have been at all times subordinated to the requirements of navigation and flood control, and have never been permitted to interfere with or affect the continued

maintenance of the stream flow required for navigation or the storage required for flood control (Woodward, 4095; Barker, 4649-4650; Karr, 5527). Temporary abnormal conditions, such as the necessity of operating for the protection of the Authority's construction works, have materially affected the operation of the Norris and Wheeler projects (Woodward, 4007; Kimball, 4382-4383).

39. The projects of the Authority are designed primarily for the improvement of navigation and the control of destructive flood waters (Bowman, 5689, 5701-5714; Watkins, 3305-3306, 3549). The sequence of development has been determined according to the requirements of navigation and flood control, and not for power (Bowman 3948-3951, 5718-5725; Barker, 4626-4628; Brodie, 4913).

40. The projects of the Authority which are completed and in operation have been and are operated primarily for navigation and flood control, and the responsible officers of the Authority charged with the operation of such projects are required by instructions from the board of directors to [fol. 591] operate them primarily for such purposes (Woodward, 4007; def. ex. 41, 65). These instructions have been uniformly obeyed (Woodward, 3996; Karr, 5506-5507).

Conservation of Water Power

41. The projects of the Tennessee Valley Authority are the only type of dams which will conserve the water resources of the Tennessee River system for navigation, Tennessee and Mississippi flood control, water power, and other beneficial uses (Watkins, 3298, 3299, 3550-3551; cf. Kurtz, 2111, 2131-2132, 2166-2167). The available sites on the Tennessee River system for the construction of dams and reservoirs are strictly limited in number, and those available for flood control coincide in many instances with those required for the regulation of the river for other purposes. The utilization of such sites exclusively for local flood protection would preclude the development of the water resources for any other purposes (comp. ex. 105, p. 64, par. 32; Bowman, 5691; Watkins, 3304-3305). The construction of low dams on the main stream of the Tennessee River for navigation would waste the resources of the river

for any other purpose. It would be physically impossible to provide the high dams on the main stream necessary for the development of flood control and power without the wasteful removal or duplication of such low dams (Bowman, 5693-5699).

42. The construction and operation of the projects of the Authority for navigation and flood control will provide a head for power by concentrating the fall of the river at [fol. 592] certain points on the Tennessee River system, and will substantially augment the minimum flow in low-water season (Watkins, 3299). Water power is a function of head and stream flow (Wessenauer, 5492). The amount of continuous power is determined by the available head and the minimum flow in low-water season. Continuous power is power available 24 hours a day, every day of the year, in every year (Wessenauer, 5460). When operated for the improvement of navigation and the control of destructive floods the dams constructed, under construction, or under investigation for construction by the Tennessee Valley Authority will provide, in addition to the benefits to navigation and flood control set forth in previous findings, and without reduction in the effectiveness of these projects for navigation and flood control, a large amount of continuous power (Wessenauer, 5447).

The firm power capacity, as distinguished from the continuous power, is the maximum demand which the system can reliably supply, having regard to the energy available, the generating units installed, the load factor and other characteristics of the system (Wessenauer, 5460). With the complete generating units which have already been installed or are under contract for installation at Norris, Wheeler, Gunter'sville, Wilson and Pickwick Landing Dams (def. ex. 140), the dams constructed or under construction by the Tennessee Valley Authority will have a firm power capacity of 395,000 kw. (def. ex. 141). Together with the additional generating units at these dams and at Hiwassee and Chickamauga Dams, which have been authorized by the Board of the Tennessee Valley Authority and for which [fol. 593] appropriations have either been made or requested (def. ex. 141), the dams constructed or under construction by the Tennessee Valley Authority will have a firm-power capacity of 570,000 kw. (def. ex. 141).

[fol. 594] Stock Ownership of Complainants

43. The National Power & Light Company, 46.56 percent of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns the following percentages of the total outstanding voting stock of the following complainants (def. ex. 135, stip. Aug. 14):

Birmingham Electric Company.....	100.00%
Carolina Power & Light Company.....	93.53%
Holston River Electric Company.....	100.00%
Memphis Power & Light Company.....	86.75%
Tennessee Public Service Company.....	99.31%
West Tennessee Power & Light Company.....	100.00%

44. The Electric Power & Light Corporation, 46.20 percent of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns 94.03 percent of the voting stock of the complainant Mississippi Power & Light Company (def. ex. 135, stip. Aug. 14).

45. The American Gas & Electric Company, 17.51 percent of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns 100 percent of the voting stock of the complainant Appalachian Electric Power Company, which in turn owns 100 percent of the voting stock of complainants Kingsport Utilities, Inc., and Kentucky & West Virginia Power Company (def. ex. 135, stip. Aug. 14).

46. During the past five years the Electric Bond & Share Company has voted the following approximate percentages of the total number of shares of voting stock represented at stockholders' meetings:

National Power & Light Company.....	62%
Electric Power & Light Corporation.....	77%
American Gas & Electric Company.....	25%

[fol. 595] Throughout the history of these companies there has been no instance in which there has been any contest over proxies or in which any interests hostile to the managements have organized opposition to the programs or policies of the respective managements or to the election of directors voted for by proxies designated by such managements (def. ex. 135, stip. Aug. 14).

47. The Commonwealth & Southern Corporation owns 91.40 percent of the outstanding voting securities of the Alabama Power Company; 100 percent of the outstanding voting securities of the Georgia Power Company, Mississippi Power Company, and Southern Tennessee Power Company; and 64.43 percent of the outstanding securities of the Tennessee Electric Power Company (def. ex. 135, stip. Aug. 14).

48. All of the common and preferred stocks of the complainant East Tennessee Light & Power Company are owned by the Cities Service Power & Light Company. All of the common stock of the complainant Tennessee Eastern Electric Company is owned by the East Tennessee Light & Power Company (Ide, 518).

Business of Complainants

49. All of the complainants are engaged in the business of generating, transmitting, distributing, and selling electricity as public utility companies, except that the Birmingham Electric Company (Pevear, 314), the Tennessee Public Service Company (Lamar, 294), the Holston River Electric Company (Cannaday, 306), the Franklin Power & Light Company (Howard, 281), the Mississippi Power Company (Sweatt, 264; Barry 576), and the Mississippi Power & Light Company (Sargent, 666), purchase practically all of their electrical requirements, and except that the Southern Tennessee Power Company neither generates nor sells power but is engaged exclusively in the business of transmitting electric energy (Nelson, 532).

Franchise Situation, Properties in Ceded Area, Indirect Competition, January 4 Contract, Misjoinder, and Damage

50. The respective complainants have been issued franchises, licenses, or easements by most but not all of the municipalities and by most but not all of the counties in which they operate electric facilities. Said franchises, licenses, or easements vary in original term and in unexpired term from a few months to more than fifty years, and many are unlimited in term. Most of the said franchises, licenses, or easements purport to be nonexclusive. Most of said franchises, licenses, or easements grant rights not limited

within the respective municipalities or counties, but some are limited to particular streets or highways or to portions of the respective counties or municipalities. Some of the franchises, licenses, or easements purport to grant the right to construct and operate electrical facilities in the streets and highways; some of said franchises, licenses, or easements purport to grant, for the purpose of conducting an electric business, the right to construct and operate electrical facilities in the streets and highways; some of the said franchises, licenses, or easements purport to grant both the right to construct and operate electrical facilities [fol. 597] in the streets and highways and the right to conduct an electrical business within the respective municipalities and counties. The validity of some of the municipal franchises, licenses, or easements claimed by complainants is now being contested in the State courts by the respective municipalities concerned (comp. ex. 3).

51. The complainant Mississippi Power Company owns no franchises or electrical facilities in 10 counties in north-eastern Mississippi. The properties in those counties were sold to the Tennessee Valley Authority under the contract of January 4, 1934, and the area is the ceded area referred to in that contract (Sweatt, 261; def. ex. 143-A).

52. The complainant Alabama Power Company does not own any electrical facilities in 6 counties in northwestern Alabama except 9 municipal distribution systems and a high-tension 110-kv. line which crosses the territory (Barry, 584; comp. ex. 326). Under the contract of January 4, 1934, the complainant Alabama Power Company transferred to the Authority all the high-voltage transmission lines leading from Wilson Dam to the municipalities in the area, with the exception of a single line leading to Decatur, the substations, and all rural lines in the area (Barry, 584).

53. Section 5 in the contract of January 4, 1934, provides that:

Alabama Company covenants and agrees to convey its urban distribution systems in the above named counties in Alabama, said distribution systems being listed in Exhibit B, to the respective municipalities in or adjacent to which such systems are located, together with all franchises, contract rights, and going business thereto appertaining, when

it has agreed with any such municipality on the price to be paid for the same. Alabama Company agrees to make every reasonable effort to come to an early agreement with said municipalities for such sales. In the event that any such municipality is unable to arrive at a satisfactory price [fol. 598] after three months of bona fide negotiation with Alabama Company, or if for some other reason the sale of any such system cannot be consummated, Authority shall have the right to serve such municipality or municipalities irrespective of whether such municipalities have purchased the distribution systems from Alabama Company (def. ex. 143-A).

54. A part of section 4 further provides with reference to the Alabama properties that:

Any conveyance of property shall include not only the physical property, easements and rights-of-way, but shall also include all machinery, equipment, tools and working supplies set forth in the respective exhibits, and all franchises, contracts and going business relating to the use of any of said properties, without extra charge (def. ex. 143-A).

55. With a few minor exceptions (a few small industrial customers in the so-called ceded area in Alabama and approximately 3,000 employees on Government reservations and rural customers in the vicinity of Norris Dam and Wilson Dam), all of the Authority's sales are either at wholesale to municipalities, rural cooperatives, and utilities, or to very large industrial customers purchasing both firm and secondary power in large bulk lots for operations not previously served by any of the complainants (def. exs. 143, 147; Karr, 5539).

56. During the period of the contract of January 4, the Authority sold power under the first proviso of section 7 of the contract to the following municipalities (Karr, 5143; def. ex. 143-A):

- Dayton, Tennessee.
- Dickson, Tennessee.
- Pulaski, Tennessee.
- Amory, Mississippi.
- Okolona, Mississippi.

57. Under the third proviso of section 7 of the contract of January 4 the Authority contracted to sell and has sold [fol. 599] electricity in substantial amounts to the Meigs County Electric Membership Corporation, the Monroe County Electric Power Association, and a number of rural customers served directly by the Authority in Roane County, Tennessee, near Norris Dam (Karr, 5544; def. ex. 143-A).

58. Under the last proviso of section 7 of the contract of January 4 the Authority contracted to sell and has sold electricity in substantial amounts to Cullman County Electric Membership Corporation, Duck River Electric Membership Corporation, Middle Tennessee Electric Membership Corporation, North Georgia Electric Membership Corporation, Pickwick Electric Membership Corporation, and in Lincoln County, Tennessee. The total load of these customers during the period of the contract was within the 2,500 kw. maximum amount stipulated in the said proviso (Karr, 5546; def. ex. 143-A).

59. Under the interchange proviso of the contract of January 4, the Alabama Power Company supplied power to the Authority for the construction of Guntersville Dam, and The Tennessee Electric Power Company supplied power to the Authority for the construction of Norris and Chickamauga Dam- (Karr, 5631-5632).

60. The Tennessee Valley Authority is not now constructing and has not authorized the construction of any transmission line, has not sold or authorized the sale of any electricity, and has not entered into or authorized any contracts for the sale of electricity in any part of the territory claimed by the complainants Franklin Power & Light Company (Howard, 285), the Appalachian Electric Power Company (Argabrite, 420-421), the Carolina Power & Light [fol. 600] Company (Yoder, 377), the Holston River Electric Company (Cannaday, 310), the Kingsport Utilities, Inc. (Argabrite, 420-421), the Kentucky & West Virginia Power Company (Argabrite, 420-421), the Tennessee Eastern Electric Company (Ide, 518), the Birmingham Electric Company (def. exs. 137, 143), the East Tennessee Power & Light Company (Ide, 518), and the Mississippi Power & Light Company, except that it has constructed a transmission line at the expense of the War Department connecting

the Authority's lines to the site of Sardis Dam in the claimed territory of the Mississippi Power & Light Company (Sargent, 665; def. exs. 137, 143).

61. The complainant Southern Tennessee Power Company is engaged only as a transmission company transmitting electric energy from Wilson Dam to the Alabama-Tennessee line, thereby connecting Wilson Dam and the transmission system of The Tennessee Electric Power Company. It is not presently engaged either in the generation or distribution and sale of electric energy (Nelson, 532).

Power Customers and Power Contracts of the Authority

62. The Authority, as of December 15, 1937, had contracts to sell power to 9 municipalities located in the ceded area covered by the contract of January 4 with the complainants Alabama Power Company and Mississippi Power Company. Seven of these municipalities are located in the ceded area in Alabama (def. ex. 143; Karr, 5531).

[fol. 601] 63. As of December 15, 1937, the Authority had contracts for the sale of power with 7 rural cooperative corporations and 8 industrial customers located in the ceded area covered by the contract of January 4 with complainants Alabama Power Company and Mississippi Power Company (def. ex. 143; Karr, 5531).

64. The Authority has a contract to sell and is delivering power in bulk lots to the complainant Alabama Power Company on the low side of several substations acquired by the Authority under the January 4 contract, by means of transmission lines also acquired by the Authority under the contract, for service to several urban distribution systems of the company in the area covered by the contract (Barry, 580-581).

65. In addition to the contracts for the sale of power in the ceded area as of December 15, 1937, the Authority had contracts to sell power to 17 municipalities, 12 cooperatives, 3 industrial customers, and 1 utility company, and the requirements of the War Department for the construction of Sardis Dam (def. ex. 143; Karr, 5531).

66. The contracts with municipalities and cooperatives provide for the wholesale delivery of power in bulk lots at a

substation at the city gates in the case of municipalities and at a substation or metering point near the location of their respective operations in the case of co-operatives, the substations and metering equipment to be owned by the Authority. (See def. exh. 143, 144; Karr, 5534; comp. exs. 119-134, 135, 196, 224; sections of contracts entitled "Point of Delivery." Contracts are reprinted in comp. ex. 118 and def. ex. 154).

[fol. 602] 67. The contracts with municipalities and co-operatives provide that all lines and substations from the point of delivery and all electrical equipment except the metering equipment of the Authority located on the municipality's or cooperative's side of such point of delivery shall be furnished and maintained by the municipality or cooperative. (See def. ex. 144; comp. exs. 119-134, 135-145, 196, 224; section in "Terms and Conditions of Contracts" usually entitled "Corporation's Lines and Equipment—Ownership," as on pp. 144, 162, 176, 188, 207, 219, 235, 247, 259 in def. ex. 154).

68. The municipalities purchasing power at wholesale from the Authority own and operate their own distribution systems and sell the power which they purchase from the Authority to the ultimate consumers, and the contracts with municipalities not yet purchasing power contemplate the same type of operations (def. exs. 144, 147; comp. exs. 119-134).

69. The cooperatives purchasing power at wholesale from the Authority own and operate their own rural distribution systems and sell the power which they purchase from the Authority to the ultimate consumers, and the contracts with cooperatives not yet purchasing power contemplate the same type of operation (def. exs. 144, 147; comp. exs. 135-145).

70. All of the Authority's contracts with said municipalities and cooperatives provide for the delivery of power at a voltage of from 2,300 volts upwards. Voltages of this magnitude are not suitable for delivery to the ultimate consumer, except for a few industrial consumers, and the municipality or cooperative which serves these consumers [fol. 603] directly steps down this voltage one or more times after receiving it from the Authority at the point of

delivery before actual delivery to the customer at the usual customer voltages of 115 and 230 volts (def. ex. 144; comp. exs. 119-134, 135-145; Moreland, 2979-2980).

71. All of the Authority's contracts with municipalities and cooperatives for the sale of power provide an arrangement whereby the Authority performs the function of a wholesaler generating and transmitting the power in bulk lots to the purchasing municipality and cooperative, which in turn sells the power to the ultimate consumers, performing all the functions of the distributor. (See def. ex. 144; comp. exs. 119-134, 135-145, 196, 224; for convenience see reprints of contracts in comp. ex. 118 and def. ex. 154).

72. The contracts with municipalities and cooperatives provide only for the sale of firm power (comp. exs. 119-134, 135-144; def. ex. 144).

73. Municipalities and cooperatives under contract to purchase and purchasing power from the Authority assume responsibility for the power at the point of delivery and sell and distribute the power from that point over their own facilities and with their own operating staffs, without any assistance or direction from the Authority (Karr, 5636-5637; Hutchinson, supp. A, 102; Pittman, supp. A, 268-269; all power contracts reprinted in comp. ex. 118 and def. ex. 154). The only assistance rendered by the Authority has been in time of emergency and in such case the Authority has been paid its full cost, including its usual overhead (Karr, 5636-5637, 5665).

[fol. 604] 74. The cooperatives to whom the Authority is under contract to sell power have certificates of incorporation from the authorized officials of the respective States in which they operate showing them to be organized under special acts of the several States in which they operate. These charters show that the corporations are organized by citizens of the respective localities in which the operations of the corporations shall be conducted who were desirous of procuring electric service, and the charter sets out the form of organization, location of the principal office, terms of membership, purposes, powers, and the names of the board of directors for the first year. (See comp. exs. 267-268 for typical Alabama charters; comp. ex. 688 for typical Tennessee charter; 3184-3185).

75. These organizations were brought about upon the initiative of the residents of the various communities who were desirous of procuring electric service, without any solicitation on the part of the Authority or any of its representatives (Cowley, supp. A, 56-57, 59; Hutchinson; supp. A, 103-107; Pittman, supp. A, 255-260).

76. Upon the request of the citizens of the rural areas in which the respective cooperatives are located, the Authority has given advice and assistance to such cooperatives on problems of organization and has given technical advice on methods of conducting surveys and determining the financial feasibility of proposed operations (Hutchinson, supp. A, 110; Pittman, supp. A, 263-264).

77. The Authority, in advising on the financial feasibility of proposed lines, has not substituted its judgment for that of the respective cooperatives. The cooperatives have made [fol. 605] all decisions on line extensions, customers to be served, and all other matters relating to the conduct of their operations (Hutchinson, supp. A, 110; Carmack, supp. A, 114; Pittman, supp. A, 260-262, 269).

78. All contracts between the Authority and the several cooperatives relating either to the construction of lines or to the sale of power have been submitted to and approved by counsel for the respective cooperatives and then considered and finally approved by the board of directors of the respective cooperatives (Carmack, supp. A, 11-12; Pittman, supp. A, 269).

79. While the Authority has in a few instances temporarily-operated directly the lines of certain cooperatives under agreements with such cooperatives providing for such operation by the Authority, all of such operating agreements had expired by December 15, 1937, and all lines constructed for cooperatives had been transferred to such cooperatives (Karr, 5540; def. ex. 143, showing dates of power contracts and initial purchases).

80. Upon the transfer of any lines constructed by the Authority for cooperatives or temporarily operated by the Authority for such cooperatives, the Authority has withdrawn completely from any participation in the conduct of the affairs of such cooperatives, except as it has continued

to supply power at wholesale and except as to the enforcement of its rights as a contractor of such of the cooperatives whose lines were financed in whole or in part by the Authority (Hutchinson, supp. A, 102, 110-111; Carmack, supp. A, 14).

81. The power contracts with industrial customers provide in some cases for the delivery of power on the low-[fol. 606] tension side of a substation, to be owned by the Authority, and in other cases on the high-tension side of a substation, to be owned by the industrial customer. In the case of the Electro Metallurgical Company the contract provides that delivery shall be made at the boundary of the Wilson Dam reservation at a high transmission voltage. All the contracts are for sales in bulk lots for use in various industrial processes. (See comp. exs. 55-56, 59-61, 117-118, 146-153; def. ex. 146; for convenience see contracts as reprinted in comp. ex. 118 and def. ex. 154).

82. These industrial contracts provide for the delivery of power at voltages comparable to or higher than the voltages at which delivery is made to municipalities or cooperatives (comp. exs. 55-56, 59-61, 117-118, 146-153; def. exs. 143-146). (For references regarding the voltage for delivery to municipalities and cooperatives see comp. exs. 119-134, 135-145, and particularly the sections in those contracts entitled "Power Supply".) These delivery voltages range as high as 154,000 volts, which is specified for the delivery to the Aluminum Company of America (contract with Aluminum Company of America, cf. def. ex. 154, p. 150; sec. 2 of the contract states the delivery voltage).

83. Except for the industrial customers located in the ceded area covered by the contract of January 4, all of the industrial customers with whom the Authority is under contract to sell power are large electro-chemical and electro-metallurgical companies (contract with Victor Chemical Works, def. ex. 154, which is the annual report of the Tennessee Valley Authority for 1937, and particularly the second "Whereas" clause on p. 303 of that exhibit, and sec. [fol. 607] 11, p. 306; and contract with Monsanto Chemical Co.; see comp. ex. 118, pp. 195-204; Karr, 5562). The Electro Metallurgical Company, which is locating a new plant in the ceded area, is also of this type (contract with

Electro Metallurgical Co., def. ex. 154, which is the annual report of the Tennessee Valley Authority for 1937, p. 315, and see particularly third "Whereas" clause and sec. 11).

84. All of said industrial customers outside the ceded area and the Electro Metallurgical Company constitute new loads in the territory. The loads contracted for have not been previously served by any of the complainant companies (def. ex. 143; 5532, 5535). Under the contracts with the Victor Chemical Works, the Monsanto Chemical Company, and the Electro Metallurgical Company (in the ceded area) these companies undertake to construct new plants and purchase power from the Authority for service to these plants (see contract with Victor Chemical Works, def. ex. 154, p. 302, and particularly sec. 1; see contract with Electro Metallurgical Co., def. ex. 154, p. 315, and particularly sec. 1; and see contract with Monsanto Chemical Co., comp. ex. 118, p. 195, and particularly sec. 1; these exhibits are annual reports of the Authority). The contract with the Aluminum Company of America shows that that company was about to enlarge its facilities and needed additional power to supplement its own generation (see contract in def. ex. 154, p. 309, and particularly the first "Whereas" clause).

85. Complainant companies do not maintain excess capacity and facilities for service to loads of such large and unusual size as that of these electro-chemical and electro-metallurgical customers of the Authority, but constructed facilities for service to these companies as needed (Miller, [fol. 608] 1727).

86. All of said large industrial customers have contracted to purchase large amounts of secondary power as well as firm power (see contracts with Victor Chemical Works and Aluminum Co., def. ex. 154, pp. 302, 309; contract with Monsanto Chemical Co., comp. ex. 118, p. 195; contract with Electro Metallurgical Co., def. ex. 154, pp. 315, 316).

87. Secondary power is that class of power the delivery of which the seller may interrupt during periods which are variously specified in the contract of sale (Moreland, 2849). All of the industrial customers outside of the ceded area have contracted to purchase large amounts of this secondary power which the Authority may, under the contracts, suspend delivery for specified periods of time, such as in event

of low-water flow (Monsanto Chemical Co., comp. ex. 118, p. 196, sec. 4; Aluminum Co., def. ex. 154, p. 309, sec. 2; Victor Chemical Works, def. ex. 154, pp. 302, 304, sec. 5(d); Electro Metallurgical Co., def. ex. 154, pp. 315, 316, sec. 4; Karr, 5561-5562). These sales of secondary power materially increase the Authority's sales of energy during the period that such power is available (Karr, 5564, 5581). These sales of secondary power to large industrial customers will increase the load factor of the Authority's operations during these periods when the power is delivered (Karr, 5581).

88. It is not feasible to sell this secondary power to such large industrial customers through a retailer or an intermediary (Karr, 5562-5563).

[fol. 609] 89. These large manufacturing plants and utility companies, such as the Arkansas Power & Light Company, with whom the Authority also has a contract providing for the sale of secondary power, are the type of customers whose operations are adapted to the use of that type of power (Karr, 5563-5564; Moreland, 2849-2850; def. ex. 154, p. 37).

90. The following contracts provide for the sale of both firm and secondary power for the period of years noted:

(a) Contract between Tennessee Valley Authority and Monsanto Chemical Company, dated May 15, 1936, for 20 years (comp. ex. 118).

(b) Contract between Tennessee Valley Authority and Aluminum Company of America, dated July 17, 1936 (comp. ex. 152), as amended by agreement of July 20, 1937, for 10 years (def. ex. 146).

(c) Contract between Tennessee Valley Authority and Arkansas Power & Light Company, dated June 16, 1937, for 5 years, but continuing in effect until cancelled by either party on 30 months' notice (def. ex. 145).

(d) Contract between Tennessee Valley Authority and Victor Chemical Works, dated July 2, 1937, for 20 years (comp. ex. 160).

(e) Contract between Tennessee Valley Authority and Aluminum Company of America, dated July 20, 1937, for 20 years, but cancellable by either party at the end of 10 years on 5 years' notice (comp. ex. 151).

(f) Contract between Tennessee Valley Authority and Electro Metallurgical Company, dated August 1, 1937, for 20 years (comp. ex. 161).

91. The maximum amounts of secondary power which the Authority has contracted to sell are as follows:

Monsanto Chemical Company.....	32,500 kw.
Aluminum Co. of America (July 17, 1936).....	40,000 kw.
[fol. 610] Arkansas P. & L. Co.....	5,000 to 20,000kw.
(prior to 6-30-38.....	10,000 kw.
year ending 6-30-39.....	15,000 kw.
year ending 6-30-40.....	20,000 kw.
year ending 6-30-41.....	15,000 kw.
year ending 6-30-42.....	10,000 kw.
thereafter.....	5,000 kw.)
Victor Chemical Works.....	16,000 kw.
Aluminum Co. of America (July 20, 1937).....	30,000 kw.
Electro Metallurgical Co.....	16,000 kw.

(All contracts are reprinted in comp. ex. 118 and def. ex. 154.)

92. The periods in which the Authority is obligated to supply such secondary power and the required notices before interrupting and resuming secondary power deliveries are as follows for the respective contracts above-mentioned:

Contract	Period Authority obligated to supply secondary power	Notice required before interruption of delivery	Notice required before resumption of delivery
Monsanto Chemical Co.	300 days annually	14 days	14 days
Aluminum Co. of America (July 17, 1936)	Not less than 90 days when and if available in judgment of Authority	15 days	15 days
Arkansas P. & L. Co.			
Prior to 7-1-42	300 days annually	15 days	7 days
Beginning 7-1-42	75% of the time	5 days	"Reasonable" time
Victor Chemical Works	9 months annually	14 days	7 days
Aluminum Co. of America (July 20, 1937)	75% of the time in ten years	21 days	7 days
Electro Met. Co.	9 months	14 days	7 days

(Contracts are reprinted in comp. ex. 118 and def. ex. 154.)

93. All of the Authority's contracts contain a force majeure clause which relieves the Authority of any obligation to supply power when prevented by injunctions, strike, riot, invasion, fire, accident, breakdown, act of God, or any other causes beyond the Authority's control. In addition, the force majeure clause in each of the contracts with the

[fol. 611] 4 large industrial contractors and the Arkansas Power & Light Company, except the force majeure clauses in the contract with the Aluminum Company dated July 17, 1936, as amended, and in the contract with the Monsanto Chemical Company, relieves the Authority of obligation to supply power when service is interrupted or suspended by reason of floods or backwater caused by floods. The force majeure clauses apply to both firm and secondary power (Contracts are reprinted in comp. ex. 118 and def. ex. 154).

94. The Authority's contracts with the Aluminum Company and the Arkansas Power & Light Company provide that if an emergency or breakdown should occur on the system of either contracting party, the other party shall stand by and supply the power needed in the emergency to the full extent its facilities enable it to do so (def. ex. 146; comp. ex. 151).

95. All contracts between the Authority and municipalities or cooperatives are for a period of 20 years from the respective dates of execution thereof, except that the contracts with the cities of Florence, Sheffield, and Tuscumbia, Alabama, all of which purchase power at the Wilson Dam reservation, are for a period of 30 years from the respective dates of execution thereof (comp. exs. 119-134, 15-145; contracts reprinted in comp. ex. 118 and def. ex. 154).

96. Substantially all power contracts contain the following provision immediately after the recitals:

Now Therefore, subject to the provisions of the Tennessee Valley Authority Act of 1933, as amended, the parties hereto agree as follows [contracts reprinted in comp. ex. 118 and def. ex. 154].

[fol. 612] 97. The following provision:

• • • should [the contracting municipality or cooperative] desire to increase its purchases in excess of — kilowatts, Authority shall deliver such excess upon written demand and after reasonable notice, provided that the requirements of Authority and/or the United States reasonably enable it to do so.

is contained in each of the contracts specified below, with the number after the name of each purchaser indicating the number of kw. entered in the blank in the clause above.

Municipality or cooperative	Complainants' Exhibit No.
North Georgia Electric Membership Corpora- tion (300).....	118
Pickwick Electric Membership Corporation (300)	139
Pontotoc County Electric Membership Corpora- tion (1,000).....	118
Joe Wheeler Electric Membership Corporation (1,000)	142
Gibson County Electric Membership Corpora- tion (300).....	137
Duck River Electric Membership Corporation (300)	140
Cullman County Electric Membership Corpora- tion (300).....	136
Middle Tennessee Electric Membership Corpora- tion (300).....	138
City of Jackson, Tennessee (480).....	133
City of Tusculmbia, Alabama (3,000).....	124
City of Trenton, Tennessee (1,500).....	132
City of Sheffield, Alabama (4,500).....	118
City of Florence, Alabama (7,500).....	123
Northeast Mississippi Electric Membership Cor- poration (750).....	144
Tippah County Electric Membership Corpora- tion (750).....	224
City of Amory, Mississippi (6,000).....	119
City of Middlesboro, Kentucky (2,000).....	130
City of Knoxville, Tennessee (35,000).....	125
City of Guntersville, Alabama (3,000).....	128

The maximum amount of power each industrial or utility customer may purchase from the Authority is definitely specified in the contract with such customer.

[fol. 613] Power Facilities Used or to be Used in Meeting
These Contracts

98. The transfer of the Muscle Shoals properties from the War Department to the Tennessee Valley Authority after the passage of the Tennessee Valley Authority Act included the Wilson Dam and power plant with eight generators having a total installed capacity of 184,000 kw. and the Sheffield steam plant with an installed capacity of

60,000 kw. (comp. ex. 113, p. 24), also 7.8 miles of high-voltage transmission lines leading from Wilson Dam to various points on the Government reservation, including Nitrate Plant No. 2 (def. ex. 136, sheet 4).

99. A single generator at Norris Dam, constructed by the Authority, was put in operation on July 28, 1936; a second generator was put in operation on September 30, 1936. Each of these generators are of 50,000 kw. capacity. A single generating unit at the Wheeler project, constructed by the Authority, was put in operation on November 9, 1936; a second unit was put in operation on April 14, 1937. Each of these units are of 32,000 kw. capacity (def. ex. 149).

100. The failure to generate and sell power available at the Wilson, Norris, and Wheeler Dams, not needed for governmental uses, would result in its complete waste. Substantial amounts of such power have been wasted because of lack of markets in every year since the construction of Wilson Dam (def. ex. 149).

101. Pursuant to the contract of January 4, with the complainants Alabama Power Company and Mississippi Power [fol. 614] Company, the Tennessee Valley Authority purchased certain transmission lines extending from Wilson Dam to the nearby area in northwest Alabama and northeast Mississippi (def. ex. 143-A). The lines, which included auxiliary electrical properties such as substations and rural lines in the area, were located in ten counties in Mississippi and six counties in Alabama (def. ex. 143-A). These sixteen counties are hereinafter referred to as the "ceded area" covered by the contract of January 4. At the time of the transfer of the properties there were approximately 14,200 electric customers in the ceded area (Sweatt, 262; Barry, 612). These customers and all additional customers in the area are now being served by municipalities, cooperatives, and the Alabama Power Company, to whom the Authority sells and delivers power at wholesale for resale in the area (def. ex. 143; Barry, 580-581); except for a few industrial customers and the rural customers, relatively small in number, in the vicinity of Wilson Dam being served by the Authority.

102. The properties in Alabama purchased from the Alabama Power Company, a complainant in this case, included 128 miles of high-voltage transmission lines (def.

ex. 136, stip. 16), 24 substations located along these lines (def. ex. 136, stip. 16), and 203 miles of rural lines. All of the municipal distribution systems belonging to the Alabama Power Company in these 6 counties, some 12 in number, were served from these transmission lines (def. ex. 143-A, sheet 6 of ex. B; Henkle, 1482-1483). They were retained by the Alabama Power Company. Approximately 1000 rural customers were served from the rural lines at the time of transfer (Henkle, 1480; Barry, 587). The industrial customers being served from these properties at the time of transfer were 48 in number, with a load of approximately 5000 kilowatts (Henkle, 1480).

103. The properties located in Mississippi were purchased from the Mississippi Power Company, a complainant in this case, and consisted of 87.3 miles of high-voltage transmission lines (def. ex. 136, stip. 16), 7 substations (def. ex. 136, stip. 16), and 167 miles of rural lines (Sweatt, 257; comp. ex. 15). Certain municipal distribution systems and steam and oil-generating plants were included in the purchase from the Mississippi Power Company (def. ex. 143-A). Subsequent to the conveyance of the municipal distribution systems to the Authority in May 1934, these distribution systems were sold to municipalities or cooperative organizations of citizens and farmers formed under the laws of Mississippi (def. ex. 143; Karr, 5538-5539; comp. ex. 117, p. 27; see contracts for power purchase with the following rural associations: Prentiss, Tombigbee, Pontotoc, Tishomingo, and Alcorn Counties, all reprinted in comp. exs. 117 and 118, reciting that certain distribution properties in Mississippi were transferred).

104. All of the properties purchased from the Mississippi Power Company were actually transferred to the Authority on approximately June 1, 1934 (comp. ex. 113, p. 25). All of the properties purchased from the Alabama Power Company were transferred to the Authority in May 1936 (Karr, 5663).

105. The only transmission lines other than those purchased or constructed by the Tennessee Valley Authority connected with any dam of the Authority are owned by the Alabama Power Company, The Tennessee Electric Power Company, and the Southern Tennessee Power Company, all subsidiaries of the Commonwealth and Southern Corporation (Hapgood, 5313; Miller, 1713-1715).

Subsidiaries of the Commonwealth and Southern Corporation and companies affiliated with the Electric Bond & Share Company own substantially all of the transmission lines and serve substantially all of the existing load centers in the area within a radius of 100 miles from each of the dams now under construction or completed (def. ex. 138; Miller, 1713-1715).

106. Unless the Authority built transmission lines leading from Wilson Dam and the dams it has constructed or has under construction it could sell power only to utility companies, except for industrial customers that might locate at the dams and such municipalities and cooperatives as are located in the immediate neighborhood of the projects. Such sales to customers other than utility companies would be very limited (Thomas, 5180-5182, 5197; Miller, 1723).

107. The Authority has constructed 407.6 miles of high-voltage transmission lines interconnecting the power plants at Wilson Dam and the other dams constructed or under construction (def. ex. 136, stip. 16).

108. Such plant tie-lines can be used to transfer power from one project to another and increase the availability and amount of power at Wilson Dam and on the resulting hydroelectric system (Hapgood, 5319, 5395; Miller 1680-1681).

109. The most economical use of the Authority's dams [fol. 617] for power supply requires interconnecting transmission lines similar to those constructed, under construction, or authorized for construction by the Authority (Hapgood, 5319-5320; Miller, 1680-1681, 1729-1730).

110. Unless these lines had been constructed, the Authority would have been forced to rely for the interconnection of its various projects upon lines belonging to companies in the Commonwealth and Southern system, more particularly the lines of the Alabama Power Company and the Tennessee Electric Power Company. These existing lines of the complainant power companies were inadequate to perform these functions, and there was no existing line connecting Wilson Dam with Pickwick Landing Dam (Hapgood, 5319-5320).

111. In addition to the plant tie-lines and the 216 miles of high-tension lines purchased under the contract of January

4, the Authority has constructed 611.6 miles of transmission lines of a voltage of 22 kw. or over; it was constructing on October 15, 1937, an additional 79.1 miles of such lines; and on that date it had authorized for construction an additional 176.9 miles of such lines (def. ex. 136, stip. 16).

112. These miles of high-voltage transmission lines constructed, under construction, and authorized by the Authority do not constitute duplication of existing transmission facilities in the area, but are useful and valuable additions to those facilities (Hapgood, 5326).

113. In addition to the 31 substations purchased under the contract of January 4 from the complainants, the Authority is constructing, has constructed, or has authorized the construction of some 33 substations along or at the end of the transmission lines it has purchased or constructed, and has constructed or is constructing five additional substations at the dams (def. ex. 136, stip. 16). The substations at the dams are used in stepping up the current generated to higher voltages for transmission, and those along the lines are used in stepping the voltages down for delivery to the Authority's wholesale customers (Moreland, 2978-2979).

114. The transmission lines substantially as constructed by the Authority are essential for service to the customers of the Authority now being served or under contract (Miller, 1716-1727; Hapgood, 5323-5324, 5405-5406). Such lines were constructed for service to the customers under contract and not for any strategic purpose of injuring or threatening the complainants (Hapgood, 5323-5324, 5405, 5406).

115. As of October 15, 1937, the Authority owned approximately 421 miles of rural lines, in the vicinity of Wilson Dam or Norris Dam (def. ex. 136, particularly ex. E). It also owned 107 miles of such lines in Lincoln County which, on December 11, 1937, it contracted to sell and transferred to the Lincoln County Electric Membership Corporation (Karr, 5539, 5540; def. ex. 144). Of the 421 miles still retained, 353 miles were constructed by the Authority, and of the 353 miles so constructed, 254 miles were located within the so-called ceded area in Alabama (def. ex. 136, particularly "TVA Direct Operations" under ex. E). The remaining 68 miles owned by the Authority were either pur-

chased from the complainant Alabama Power Company under the contract of January 4 or were purchased from [fol. 619] the complainant The Tennessee Electric Power Company (def. ex. 136, particularly ex. E).

116. In addition to the rural lines which the Authority has purchased or constructed and still retains, it has constructed 1,023 additional miles of such lines and sold them to municipalities or rural cooperatives with whom it was under contract to sell electric energy at wholesale; it constructed an additional 1,343 miles of such lines under construction contracts with municipalities or cooperatives having power-purchase contracts (def. ex. 136, stip. 16).

117. The rural lines constructed by the Authority and sold to the cooperatives were constructed with the Authority's own funds and sold to the respective cooperatives at the actual cost of such lines to the Authority plus its regular overhead charges, under an agreement secured by mortgage or other instrument of security for the repayment to the Authority of the indebtedness out of the proceeds of the electric business of the cooperative (comp. ex. 181; and, for example, see sec. 5 on p. 241 of comp. ex. 118).

118. The remaining rural lines constructed by the Authority for the cooperatives were constructed by the Authority under construction contracts between the Authority and cooperatives under the terms of which the Authority has been repaid its actual construction cost, including the usual overhead (comp. exs. 162-175; for example, see sec. 3 of comp. exs. 163, 167, 169).

119. Some of the respective cooperatives and municipalities purchasing power from the Authority have constructed [fol. 620] many miles of rural line either by contract with an independent contractor or with their own crews without any aid or assistance, financial or otherwise, from the Authority or any other federal agency (def. ex. 136, stip. 16, and particularly column 5 of ex. E).

120. The high-tension transmission lines constructed by the Authority are similar in character and function to the lines purchased by the Authority under the contract of January 4. The substations constructed by the Authority are similar in character and function to the substations purchased by the Authority under the contract of January 4.

The rural lines constructed by the Authority and retained in ownership or sold are similar in function and character to the rural lines acquired by the Authority under the contract of January 4 (def. exs. 136, 136-A, 136-B, 137; stip. 16).

121. The Authority does not own or operate any municipal or urban distribution systems (Karr, 5539; def. ex. 154, p. 19).

Power Sales, Present and Potential

122. During the period from May 18, 1933, to January 1934 and of the contract of January 4, approximately 75 percent of the electricity sold by the Authority was sold to complainant power companies, subsidiaries of the Commonwealth & Southern Corporation, including the complainant Alabama Power Company, complainant Mississippi Power Company, complainant The Tennessee Electric Power Company, and noncomplainant Georgia Power Company. The total of the power so disposed of to these utility companies [fol. 621] since the passage of the Tennessee Valley Authority Act has amounted to 1,216,451,142 kwh. (def. ex. 147). The systems of all of the Commonwealth and Southern companies are interconnected into a single integrated system, and power delivered to one of these companies is merged in the common pool and becomes a joint source of supply (Middlemiss, 2237, 2285).

123. The power sold in the year 1937 was obtained exclusively from the hydroelectric generating facilities of the Authority, either directly or through interchange arrangements with the Commonwealth and Southern companies and the Aluminum Company of America (def. ex. 147, sheets 15-17). The steam plant at Muscle Shoals is not in operation (Karr, 5660).

124. In the calendar year 1937, the Tennessee Valley Authority sold substantial quantities of power to 17 municipalities owning and operating their own municipal distribution systems, 15 rural cooperatives owning and operating their own rural lines, 8 industrial customers, and 2 private utility companies (def. ex. 147, sheets 6-8; for sales to the 2 utility companies, see comp. ex. 375, Rankin, 2427; for date of initial purchase by Arkansas Power & Light Co., see def. ex. 143, sheet 2; for sales to Alabama Power Co. in

1937, see Barry, 580-581). In addition, the Authority sold substantial quantities of power to the Commonwealth and Southern companies in January and February under an extension of the contract of January 4 (def. ex. 147, sheet 7).

125. In addition to these sales under outstanding power contracts, the Authority sold electric energy to residents on 6 Government reservations and to rural residents residing in the vicinity of Wilson and Norris Dams and Lincoln [fol. 622] County, Tennessee (def. ex. 147, sheet 6). On December 11, 1937, the Authority contracted to sell the rural lines in Lincoln County, Tennessee, and the Lincoln County Electric Membership Corporation contracted to buy said lines, and since that date these lines have been operated by the Lincoln County corporation (Karr, 5538-5540; def. ex. 144).

126. As of October 31, 1937, the total of all residents served by the Authority on Government reservations and in the surrounding areas, exclusive of Lincoln County, was 3,228 (def. ex. 147). All of the Authority's remaining sales of electricity for public use were made at wholesale to municipalities and rural cooperatives (def. ex. 147, sheets 6-8). The number of ultimate consumers so served as of October 31, 1937, by said municipalities and cooperatives was approximately 31,900 (def. ex. 147, sheets 7-8).

127. The direct sales to temporary rural customers and employees on Government reservations have been less than 4 percent of the total kw. sa each year of the Authority's operations (def. ex. 147).

128. In addition to these sales in 1937, power generated by the Authority has been used in the construction of Chickamauga, Gunter'sville, Hiwassee, Norris, Pickwick, and Wheeler Dams, for service to the fertilizer works at Muscle Shoals, and for the operation of the navigation locks at the Authority's dams on the main stream of the Tennessee River (def. ex. 147, sheet 6).

129. As of December 15, 1937, of the total number of 18 municipalities receiving wholesale service from the Authority, only 6 previously received service of any kind from any of the complainant companies. Of these, 5 were located in the ceded area covered by the contract of Janu-

[fol. 623] ary 4, 1934. The residents of the city of Jackson, Tennessee, outside the ceded area, were served directly by the complainant West Tennessee Power & Light Company and some of them have stopped taking service from the complainant company and are buying from the city (Winkler, 1410).

130. All of the municipalities purchasing power from the Authority in 1937 owned and operated their own municipal distribution systems for a long time before the passage of the Tennessee Valley Authority Act, with the exception of Florence, Sheffield, and Tuscumbia, Alabama, and the city of Jackson, Tennessee (def. ex. 143, sheet 1). The cities of Florence, Sheffield, and Tuscumbia, Alabama, are located in the ceded area covered by the contract of January 4, and their boundaries adjoin the Wilson Dam reservation (def. ex. 143-A). The residents of these municipalities were previously served by the Alabama Power Company, which was operating distribution systems in those cities without franchises long before the Authority contracted with the municipalities (Hood, 536, 538; def. ex. 143).

131. Except for the cities of Athens, Alabama, Dayton, Tennessee, and Tupelo, Mississippi, all of the municipalities purchasing power at wholesale in 1937 which owned and operated their own distribution systems prior to purchasing from the Authority also owned a generating plant which was used to supply power for such systems (def. ex. 143, sheet 1). The cities of Athens, Alabama, and Tupelo, Mississippi, both located in the ceded area covered by the contract of January 4, purchased their power at wholesale from the Alabama Power Company and the Mississippi Power Company, respectively, while Dayton, Tennessee, purchased its power supply from a local lumber mill (def. ex. 143, sheet 1, footnote # # #).

[fol. 624] 132. Only 2 customers of the total number of 16,108 customers receiving service as of October 31, 1937, from the 15 cooperatives purchasing power at wholesale from the Authority over all the rural lines they operated, whether constructed by them or by the Authority for them, ever received electric service of any kind from any of the complainant companies, except for customers located in the ceded area and served by means of lines sold to the Authority under the contract of January 4 and resold by the

Authority to the cooperatives (Street, 1242; Wisdom, 483, Winkler, 1418; Henkle, 1493; Jacobs, 1338; Bonner, 1308; Perkins, 1355-1358; Watson, 1376, 1391; Ostermuller, 1264).

133. Except for rural customers located in the ceded area on lines purchased from the complainant power companies, none of the rural customers served by the Authority or by municipalities purchasing power at wholesale from the Authority ever received service from any of the complainant companies (Street, 1242; Wisdom, 483; Winkler, 1418; Henkle, 1493; Jacobs, 1338; Bonner, 1308; Perkins, 1355-1358; Watson, 1376, 1391; Ostermuller, 1264).

134. None of the industrial loans which the Authority served in 1937 were previously served by any of the complainant companies except the industrial customers in the ceded area in Alabama whose contracts were assigned to the Authority under the contract of January 4 (def. ex. 143, sheet 2).

135. In addition to the customers served by the Authority as of December 15, 1937, the Authority was as of that date under contract to serve 8 municipalities, 3 rural cooperatives, 2 industrial customers, and the War Department's requirements for the construction of Sardis Dam [fol. 625] (def. ex. 143, sheet 2).

136. Of the municipalities under contract but not yet purchasing as of December 15, 1937, 2 are located in the ceded area in Alabama, 1 is not served by any of the complainants (Middlesboro, Kentucky, served by Kentucky Utilities Company) and 5, including Chattanooga, Tennessee, Knoxville, Tennessee, Memphis, Tennessee, Guntersville, Alabama, and Paris, Tennessee, are now served by the complainants The Tennessee Electric Power Company, Tennessee Public Service Company, Memphis Power & Light Company, Alabama Power Company, and Kentucky-Tennessee Light & Power Company, respectively; that is, these companies presently own and operate urban distribution systems in the 5 municipalities (def. ex. 143, sheet 2). The Authority is under contract to sell power at wholesale to these municipalities as soon as they acquire distribution systems. If the municipalities construct new distribution systems and sell power and the complainants continue to operate their existing distribution systems in these municipalities, it is reasonable to believe that a large num-

ber of customers of complainants will elect to buy from the municipalities.

137. Of the 3 cooperatives under contract but not yet purchasing power as of December 15, 1937, 1 is located within the ceded area in Mississippi. None of the 3 had previously purchased power from any of the complainants (def. ex. 143, sheet 1).

138. Of the 2 industrial customers under contract but not yet purchasing power as of December 15, 1937, 1 is located in the ceded area in Alabama. Neither of the 2 was previously served by any of the complainants (def. ex. 143, sheet 1).

[fol. 626] Reasonableness of Conduct of Authority in Disposition of Surplus Power

139. Under the contract of January 4, as amended and supplemented, the Commonwealth and Southern Corporation, as agent for its subsidiaries Alabama Power Company, The Tennessee Electric Power Company, Mississippi Power Company, and Georgia Power Company, purchased from the Authority power in the aggregate value of \$1,814,918.04 (def. ex. 150). In addition thereto the Alabama Power Company had purchased from the Authority prior to January 4, 1934, power in the aggregate value of \$479,573.67 (def. ex. 150). The amounts of power delivered by the Authority to the Alabama Power Company and The Tennessee Electric Power Company (for the subsidiaries of the Commonwealth and Southern Corporation above mentioned), from January 4, 1934, to January 1, 1935, and for the calendar years 1935 and 1936, were as follows (def. ex. 150):

Alabama Power Company.....	1934	110,127,068 kwh.
	1935	164,127,787 kwh.
	1936	344,308,127 kwh.
The Tennessee Electric Power Co. . .	1934	39,514,200 kwh.
	1935	76,022,503 kwh.
	1936	212,313,103 kwh.

140. In addition to the sales of power under the contract of January 4, the Authority is currently selling power to 2 utility companies under recent contracts, and has practiced no discrimination against complainant utility companies or

other utility companies in the sale of power (def. ex. 145; Barry, 580-581).

141. The so-called power policy of the Authority, dated August 15, 1933, consisting of a joint press release, was [fol. 627] never formally approved by the board of directors of the Authority nor ever put into action or followed (def. ex. 29).

142. The Authority has sold substantial blocks of power to many municipalities which formerly operated their own municipal generating plants, which sales did not involve any displacement of any existing load of the complainant companies (def. ex. 143). The Authority has sold substantial blocks of power to cooperatives for distribution by them in rural areas to rural customers heretofore unserved, which sales did not involve any displacement of any existing load of complainant power companies (Carmack, supp. A, 13; Cowley, supp. A, 59; Hutchinson, supp. A, 107-108; Street, 1242; Wisdom, 483; Winkler, 1418; Henkle, 1493; Jacobs, 1338; Bonner, 1308; Perkins, 1355-1358; Watson, 1376, 1391; Ostermuller, 1264). The Authority has sold substantial blocks of power to industrial concerns who located new plants or enlarged existing plants, which sales did not displace any existing load of complainant power companies (def. ex. 147, sheet 6). The Authority has sold substantial blocks of power to complainant and noncomplainant companies with existing utility networks. In fact, none of the sales of power by the Authority have directly displaced any existing load of complainant companies except in the ceded area covered by the contract of January 4 in which the Authority purchased for valuable considerations the existing facilities from the complainant Alabama Power Company and Mississippi Power Company (def. ex. 143-A). None of the Authority's sales of power to date have indirectly displaced any existing load of the complainants outside the ceded area, except that the complainant West Tennessee [fol. 628] Power & Light Company has lost some customers to the city of Jackson and has lost a load of approximately 50 kw. in the town of Gibson which it sold to the Gibson Power & Light Company; this latter load was lost to the complainant West Tennessee Power & Light Company when the properties in the town of Gibson were sold at auction by

the Gibson Power & Light Company to the Gibson County Electric Membership Corporation (Wisdom, 485).

143. The officials of the Authority have taken the position in correspondence with municipal officials that the question of whether a municipality shall own and operate its own distribution system is one for the sole determination of the municipality (comp. ex. 412; def. exs. 5-9).

144. The Authority does not aid or assist in conducting surveys to determine the economic feasibility of proposed municipal plant operations by municipalities applying for the purchase of power from the Authority (comp. ex. 412).

145. The standard of the Authority in entering into power contracts with municipalities is the financial feasibility of extending wholesale service to such municipalities as apply for wholesale service (comp. ex. 412).

146. The Authority has not confined its power disposition to those municipalities which previously did not own and operate their own municipal distribution systems (def. ex. 143). On the other hand, the Authority has throughout the course of its existence entered into a large number of contracts with municipalities who owned and operated municipal distribution systems before the passage of the Tennessee Valley Authority Act (def. ex. 143). The power contracts between the Authority and municipalities are substantially uniform, and there are no special provisions favoring municipalities who had not previously owned and operated their distribution systems or discriminating against municipalities that did own and operate their municipal distribution systems before the passage of the Tennessee Valley Authority Act (comp. exs. 119-134, 135-145).

147. The contracts for the disposition of power between the Authority and municipalities and cooperatives contain provisions in which the parties agree that certain schedules of rates shall be charged by the wholesale purchaser to persons to whom it resells. These provisions for agreed resale rates are contained in all contracts regardless of whether or not the complainant utility companies own and operate distribution systems in the municipality or area where the purchased power is to be resold (comp. exs. 119-134, 135-145).

148. The Authority has made no effort to regulate the rates of its municipal or cooperative customers and has taken no action regarding such rates other than entering into the initial agreement establishing resale rates.

149. There have been uniform and progressive increases of a substantial character in the amount of wholesale purchases of power made by each municipality which has purchased power from the Authority (def. exs. 147, 154, pp. 20-21).

150. There has been a uniform and progressive increase [fol. 630] in the number of ultimate consumers served by each municipality and cooperative that has purchased power at wholesale from the Authority (def. ex. 147).

151. The amount of power purchased by each of the municipal customers of the Authority in October 1937 was on the average about 100 percent in excess of the respective amounts purchased by the respective municipalities in the initial month of wholesale service by the Tennessee Valley Authority (def. ex. 147). This percentage of increase is in excess of the highest percentage of increase of any of the complainant companies in power sold to regular customers from 1933 to 1936 (def. ex. 2, stip. 11; comp. exs. 10, 15, 23, 28, 30, 35, 38, 46, 55-57, 76, 84, 85, 96, 104). It is greatly in excess of the approximately twenty percent of increase in the national production of electricity for the same period of years (comp. ex. 99, 99-A).

152. The annual average consumption of residential customers of municipalities and cooperatives purchasing power from the Authority generally exceeded the average for the same class of customers of the complainant companies. (For averages of residential customers of wholesale purchasers from TVA, see p. 3 of comp, ex. 919); for averages of residential customers of complainant companies, see comp. ex. 10, 16, 28, 35, 38, 61, 62, 63, 76, 84, 85, 96, 104).

153. The Authority has not induced the breach of any power contract between any complainant and any of its customers.

154. In marketing the power generated at its dams the Authority has not engaged in any solicitation of customers, [fol. 631] coercion, duress, fraud, or misrepresentation in

procuring contracts with municipalities, cooperatives, or other purchasers of power.

155. In marketing the power generated at its dams, the Authority has not acted with any malicious or malevolent motive and has not conspired with municipalities or other prospective purchasers of power.

Extent of Displacement of Existing Utilities Threatened

156. The defendant Authority has no plans and has made no investigations of any substantial character for the construction of any dams in the Tennessee Valley except the 7 high dams on the main stream and Norris and Hiwassee Dams on the tributaries. Other than these projects it has recommended only the construction of the Fontana Dam on the Little Tennessee River (Bowman, 3752). The surveys of the Tennessee River basin and its tributaries conducted by the Corps of Engineers of the United States Army for the War Department and reported in House Document No. 328, 71st Congress, second session, concerned combined public and private projects; the 149 projects so surveyed have not been recommended for construction by the Federal Government (comp. ex. 105, paragraph 33, p. 19 et seq.; 762, 763).

157. It is reasonably estimated that the utilities within ready transmission distance of the Authority's run-of-river plants, constructed or under construction, will require 310,000 kw. of additional capacity in 1939 and 787,500 kw. of [fol. 632] additional capacity in 1943 (Thomas, 5143-5144; def. ex. 133). Of this amount the requirements of the Commonwealth and Southern companies, which are complainants herein, plus the requirements of the noncomplainants Georgia Power Company, Gulf Power Company, and South Carolina Power Company, affiliated and interconnected noncomplainant companies, are 207,000 kw. in 1939 and 559,000 kw. in 1943 (def. ex. 133); and the requirements of the Electric Bond & Share companies who are complainants herein and affiliated noncomplainant companies are 88,200 kw. in 1939 and 190,000 kw. in 1943 (def. ex. 133). The estimated energy requirements for the companies within ready transmission distance of the Authority's run-of-river dams, constructed or under construction, will be over 770,000,000 kwh. in 1939 and over 2,150,000,000 kwh. in 1943 (Thomas,

5157; def. ex. 133). Of these amounts the additional requirements of the Commonwealth and Southern complainant companies and the Georgia Power Company will be over 550,000,000 kwh. in 1939 and 1,600,000,000 kwh. in 1943 (def. ex. 133). The additional energy requirements of the Electric Bond & Share Company and affiliated companies with which they are interconnected will be over 200,000,000 kwh. in 1939 and over 560,000,000 kwh. in 1943 (def. ex. 133).

158. Some of the complainants have added substantially to their generating capacity since 1933 (comp. ex. 502). Some of the complainants are preparing for the construction of additional generating plants of a substantial capacity. The Tennessee Electric Power Company is preparing to construct a steam plant at Nashville with a generating capacity of approximately 25,000 kw. (Middlemiss, 2336). The Appalachian Electric Power Company is constructing a [fol. 633] hydroelectric project on the New River in Virginia with a planned installed capacity of about 75,000 kw. (Argabrite, 426) and has leased 55,500 kw. of power from the Federal Government at navigation projects on the Kanawha River (Argabrite, 425-426). The Arkansas Power & Light Company has contracted to purchase 40,000 kw. from the Authority in the near future (def. ex. 145: Rankin, 2427).

159. There is a steadily increasing demand for electric energy in the area within transmission distance of the Authority's projects constructed, under construction, and investigated for construction (Thomas, 5175-5177; comp. exs. 360, 370, 372, 374-376, 501).

160. There are unserved potential markets for the electric energy which may be generated at the projects of the Authority, not involving any displacement of the existing loads of complainant companies, including new industries and unserved rural areas. The percentage of rural electrification in the States which make up the Tennessee River basin is small. In 1933 it ranged from 0.8 percent in Mississippi to 7.9 percent in Virginia (Hapgood, 5337-5338). In 1936 it ranged from 2 percent in Mississippi to 10.3 percent in Virginia (Hapgood, 5337).

161. There are many unserved rural areas. A great majority of the so-called rural customers on lines of complainants existing in the counties or areas where the lines of the cooperatives have been constructed were in towns of a popu-

lation of 100 or more or within 6 miles of a transmission substation (Hapgood, 5420). There was little area-wide rural electrification. The fact that the lines of the cooperatives extend out from load centers or communities produces [fol. 634] less customer density to the mile (Hapgood, 5420).

162. The growth in demand in terms of the firm peak load of the principal companies operating in territory located within a radius of 250 miles of the dams recommended in the TVA unified plan from 1929 to 1936 was approximately 22 percent, that is, from 2,992,000 kw. in 1929 to 3,652,000 kw. in 1936 (comp. ex. 501, line 13; Moreland, 2902). It is reasonably estimated by experts from both sides that this firm peak load will increase at least an additional 772,000 kw. or 21 percent by 1939 (comp. ex. 501, column 13; Thomas, 5176).

163. By the date the power generating units authorized for the dams of the Authority are installed, it is reasonably estimated by witnesses for both sides that the power demand in the area within transmission distance of the projects of the Authority will be greatly in excess of the present peak load ability of the existing generating plants in the area (comp. ex. 501; def. ex. 133; Thomas, 5157). Unless additional generating capacity is provided by private utilities or at the projects of the Authority, there is likely to be a substantial power shortage.

164. Without subtracting the substantial amounts of power which the Authority has contracted to sell to large industrial customers, the Arkansas Power & Light Company, and municipalities not yet served, the amount of power which will be available at the projects of the Authority with authorized installations of generating capacity is less than the amounts of power necessary to meet the increases in demand in the area served by private utilities within transmission distance predicted for the date when these installations are scheduled for completion (def. ex. 133, 141; comp. ex. 508, 510).

165. For most of the complainants, 1936 represented a new high point in volume of power sales, the increases from 1930 to that year ranging up to more than 50 percent. Since 1933 sales to regular customers have increased even more rapidly, the rates of growth during the latter period ranging up to approximately 75 percent (Tenn. Elec. Power Co., comp. ex.

10; Miss. Power Co., Sweatt, 267; Miss. P. & L. Co., Sargent, 664-665; Tenn. Public Service Co., Lamar, 301-302; West Tenn. P. & L. Co., Wisdom, 472; Memphis P. & L. Co., Ford, 337-338; Ala. P. Co., Barry, 598; Ky. Tenn. L. & P. Co., Ostermuller, 1268).

166. The number of electric customers served has shown a substantial increase for each of the respective complainants, the present number of customers served in 1937 constituting a new high for the said respective complainants (def. ex. 2, stip. 11).

167. Both the gross and the net revenues of the respective complainants in their electric utility operations have increased substantially in the period since the creation of the Tennessee Valley Authority (def. ex. 2, stip. 11).

168. In many cases the gross revenues have reached a new high for the respective companies (def. ex. 2).

169. From 1933 to the middle of 1937 the rate of growth in the consumption of electricity in the 7 States, parts of which compose the Tennessee Valley basin, has been in excess of the national rate (comp. ex. 919; comp. ex. 99). The increase in average annual residential use of customers of many utilities operating in the area from 1933 to 1937 [fol. 636] greatly exceeds the increase in national average annual residential use (def. ex. 154, p. 22 for national rate of increase; see comp. exs. 10, 16, 28, 35, 38, 61, 62, 76, 84, 85, 96, 104, for rates of increase for complainant companies).

Mitigation of Potential Damages

170. The generating and transmission facilities of the complainants Alabama Power Company, Mississippi Power Company, the Tennessee Electric Power Company, and non-complainants Georgia Power Company, Gulf Power Company, and South Carolina Power Company are interconnected and are operated as an integrated power pool (Middlemiss, 2337; Barry, 610).

Any point on the system of any of said companies may be served with power generated at any other point in said power pool (Middlemiss, 2337, 2285; Thomas, 5141).

171. The facilities of complainants West Tennessee Power & Light Company, Memphis Power & Light Company, and

Mississippi Power & Light Company, and noncomplainants Louisiana Power & Light Company and Arkansas Power & Light Company, both members of the Electric Bond & Share Company system, are interconnected and operated as a common integrated transmission and generating pool (Rankin, 2426).

172. The entire power requirements of the complainant Tennessee Public Service Company are purchased from complainant Carolina Power & Light Company (Lamar, 294). The Carolina Power & Light Company is interconnected with the Appalachian Electric Power Company and [fol. 637] the Duke Power Company (Yoder, 375).

173. The generating and transmission facilities of the Appalachian Electric Power Company, Kingsport Utilities, Inc., and Kentucky & West Virginia Power Company, Inc., are interconnected and operated as an integrated transmission and generating plant system (Argabrite, 398).

174. The generating and transmission facilities devoted to service to the municipalities now served by the respective complainants and under contract to purchase power from the Authority form parts of integrated transmission and generating systems and may be devoted to serving the growth in other loads on the system should there be any loss of load in any given municipality which purchases power from the Authority due to loss of customers to said municipality (Hapgood, 5423).

175. The unserved rural market in the area adjacent to the lines of the respective complainants which can be economically served by the complainants is negligible in amount and the injury to the respective complainants from any extension of rural lines for service to this market by the Authority or municipalities or cooperatives purchasing power at wholesale from the Authority would also be negligible (Ford, 330; Yoder, 370; Argabrite, 415-416; Ide, 504; Sargent, 650; Stanley, 1031; Street, 2215; Ostermuller, 1257; Bonner, 1290; Jacobs, 1334; Perkins, 1352; Watson, 1371; Winkler, 1407-1408).

176. Prior to the completion of generating plants at Norris Dam on July 28, 1936, and Wheeler Dam on November 8, 1936 (def. ex. 150), all power supplied by the Authority [fol. 638] to said companies under the contract of January

4, 1934, was supplied from Wilson Dam. Wilson and Norris Dams are and have been interconnected from and after July 28, 1936. Norris Dam began generating power on July 28, 1936, and Wheeler Dam on November 9, 1936 (def. ex. 150). All power purchased by the Alabama Power Company and The Tennessee Electric Power Company from and after the respective dates of completion of Norris and Wheeler Dams was supplied from an interconnected pool, including the power generated at both of said dams from and after the dates of completion.

177. The months of June through December 1936 were months of subnormally low stream flow in the Tennessee River (Karr, 5565). The purchases of power from the Authority by the Commonwealth and Southern companies in these months were very substantial. During the 7 months these purchases amounted to 552,562,368 kwh. (def. ex. 147), which was slightly more than the total amount of kwh. which could have been generated at Wilson Dam without the benefit of storage releases from Norris Dam. During August, September, and November the purchases by the Commonwealth and Southern companies were substantially greater in proportion to the generating ability of Wilson Dam without benefit of Norris Dam (Karr, 5569); these purchases ranged from 110 percent to 137 percent of the amount of power which could have been generated at Wilson Dam in those months without the benefit of Norris Dam (def. ex. 148). During this 7-month period the sales to the Commonwealth and Southern companies were approximately 92 percent of the amount of power which could be generated at Wilson Dam including the benefit of Norris storage releases (def. ex. 148) and 83.45 percent of the total TVA system sales (def. ex. 148). In August, September, and November [fol. 639] the Commonwealth and Southern companies purchased more power than Wilson Dam generated, including the generation resulting from Norris storage releases, the percentages varying from 101.82 percent in August to 108.51 percent in September (def. ex. 148).

[fol. 640] Supplement on Power Contracts

178. The Authority has contracts with municipalities now purchasing power calling for the availability of 38,380 kilowatts (comp. exs. 119, 123, 122, 133, 120, 134, 118, p. 141; 118, p. 144; 118, p. 189; 118, p. 223; 118, p. 236;

Tupelo, comp. ex. 113; Pulaski, comp. ex. 117; Dayton, comp. ex. 117; Athens, comp. ex. 117).

179. The Authority has contracts with municipalities not yet purchasing power calling for the availability of 135,000 kilowatts (comp. exs. 127, 128, 129, 126, 132, 134; 118, p. 166, 169; Middlesboro, comp. ex. 130).

180. The Authority has contracts with rural cooperatives now purchasing power calling for the availability of 9,300 kilowatts (comp. exs. 136, 135, 138, 139, 140, 141, 142, 196; 118, pp. 205, 218).

181. The Authority has contracts with industrial companies by which it contracts to sell 127,850 kilowatts of firm power (comp. exs. 509, pp. 146, 147, 148, 149, 150, 155).

182. The Authority has contracts with industrial companies and utilities by which it contracts to sell 139,500 kilowatts of secondary or interruptible power (comp. ex. 509).

[fol. 641]

Conclusions of Law

1. The Tennessee Valley Authority Act is a valid exercise of the constitutional powers of Congress.

2. All of the acts complained of and established by the evidence in this cause are authorized by the terms of the Tennessee Valley Authority Act, and the portions of the statute granting such authority are within the constitutional powers of Congress.

3. Neither the Tennessee Valley Authority nor any of its directors have exceeded the powers conferred upon them by the Tennessee Valley Authority Act.

4. The Tennessee River from its mouth at or near Paducah, Kentucky, to a point above Knoxville, Tennessee, is in law a navigable interstate waterway of the United States.

5. Under the power to regulate and promote interstate commerce conferred by subsection 3 of section 8 of article 1 of the Constitution of the United States, the Federal Government has the power to improve the navigable character of the Tennessee River by means of the construction of dams and reservoirs upon the main stream of the Tennessee and its tributaries. The selection or determination of the par-

ticular types of dams to be constructed for this purpose is a matter to be determined by Congress or its authorized agents.

6. The Federal Government, under the powers delegated to it by the Constitution of the United States, has the power to construct dams and reservoirs upon navigable rivers of the United States and upon tributaries of such navigable [fol. 642] rivers for the purpose of controlling flood waters on such rivers. The selection or determination of the particular types of dams to be constructed for this purpose is a matter to be determined by Congress or its authorized agents.

7. Under the powers delegated to it by the Constitution of the United States, the Federal Government has the power to construct dams and reservoirs for the purpose of protecting interstate commerce both upon the navigable waterways and upon the highways and railroads from interruption and interference due to destructive floods.

8. Under the powers delegated to it by the Constitution of the United States, Congress has the power to construct dams and reservoirs for the purpose of protecting the instrumentalities of interstate commerce, including navigable waterways, railroads, highways, and manufacturing establishments engaged in the production of goods moving in interstate commerce from the hazards and interruptions resulting from destructive floods.

9. Under the powers delegated to it by the Constitution of the United States, the Federal Government has the power to construct dams and reservoirs upon the Tennessee River and its tributaries for the purpose of controlling destructive floods in the Tennessee and Mississippi River Valleys.

10. Under the power to regulate and promote interstate commerce, the Federal Government has the constitutional power to construct all dams in the Tennessee River and its tributaries that are reasonably related to the improvement of the navigable character of the Tennessee River or any of its navigable tributaries.

[fol. 643] 11. Under the powers delegated to it by the Constitution of the United States, Congress has the power to authorize the construction of all dams upon the Tennessee River and its tributaries that will in fact contribute to the

control of destructive floods in the Tennessee and Mississippi River Valleys.

12. Under the power to regulate and promote commerce between the several States, Congress has the constitutional power to authorize the construction of each of the dams constructed, under construction, or under investigation for construction by the Tennessee Valley Authority upon the main stream of the Tennessee River and its tributaries.

13. By the terms of the Tennessee Valley Authority Act, Congress has created the Tennessee Valley Authority as an agency of the Federal Government, and has expressly authorized this agency to construct each of the dams constructed, under construction, or under investigation for construction on the main stream of the Tennessee River and its tributaries. Congress has from time to time authorized the construction of each individual dam constructed or under construction by appropriate appropriation statutes.

14. The water power created as a result of the construction of the dams authorized by the Tennessee Valley Authority Act is the property of the United States.

15. Congress has the constitutional power to authorize the installation and operation of such generating facilities at the dams authorized by the Tennessee Valley Authority Act as may be necessary to generate electric energy from the water power created by the construction of such dams.

[fol. 644] 16. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to make provision in the dams constructed by it upon the Tennessee River and its tributaries for the necessary facilities for generating electric energy. The statute specifically authorizes the installation and operation of power houses, generators, and other facilities.

17. The electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act is the property of the United States, and may be disposed of by Congress or its authorized agency under subsection 2, section 3, article 4 of the Constitution of the United States.

18. The electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act is lawfully and legally acquired property of the United States

resulting from the exercise of its constitutional powers, and may be used or disposed of in any manner which the Congress, in the exercise of its discretion, may select as the reasonable means of such disposition.

19. The Tennessee Valley Authority Act directs the Tennessee Valley Authority to operate all of the dams constructed by it primarily in the interests of navigation and flood control, but expressly authorizes the said Tennessee Valley Authority to generate electric energy at said dams insofar as this can be done consistent with the interests of navigation and flood control.

20. The method of operation of the dams and reservoirs constructed and under construction which the defendants have followed and propose to follow in the future is authorized by the Tennessee Valley Authority Act.

[fol. 645] 21. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the construction of transmission lines from the dams authorized by the Tennessee Valley Authority Act in order to dispose of the electric energy generated at such dams.

22. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the Tennessee Valley Authority to generate electric energy at all dams authorized by the Tennessee Valley Authority Act, to construct or acquire transmission lines leading from such dams to municipalities, cooperative associations of citizens and farmers not organized for profit, large industrial customers, and other purchasers of power.

23. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to construct or acquire transmission lines leading from each of the dams constructed under the authority of the Tennessee Valley Authority Act to the surrounding market area.

24. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to sell electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act to wholesale customers under long-term contracts.

25. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to sell electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act direct to rural customers and inhabitants of small towns and villages, and to industrial customers.

[fol. 646] 26. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to own and operate transmission lines and rural distribution lines for the purpose of transmitting and selling the electric energy generated at said dams.

27. Under the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to enter into contracts with municipalities, cooperative associations of citizens and farmers not organized for profit, and industrial customers for the sale of electric energy generated at the dams constructed by the Tennessee Valley Authority under said act.

28. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to sell electric energy generated at any of the dams constructed under the terms of said act direct to rural customers and inhabitants of small towns and villages.

29. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to own and operate transmission and rural distribution lines for the purpose of transmitting and selling the electric energy generated at any of the dams constructed under the authority of said act.

30. By the terms of the Tennessee Valley Authority Act, Congress has directed the Tennessee Valley Authority to give preference in the sale of power to States, counties, municipalities and cooperative organizations of citizens or farmers not organized for profit. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

[fol. 647] 31. The Tennessee Valley Authority Act authorizes the Authority to construct rural transmission lines for service to farmers or cooperative organizations of citizens

or farmers and to sell such lines to municipalities or such cooperative organizations. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

32. The Tennessee Valley Authority Act authorizes the Authority to sell power direct to industrial customers in order to increase the load factor on the system. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

33. The Tennessee Valley Authority Act authorizes the Board of Directors of the Authority to fix the rates at which the electric energy generated at the dams authorized by the Tennessee Valley Authority Act may be sold. The statute vests discretion in the board in fixing such rates, and the exercise of this discretion is not subject to judicial review. This provision of the statute is a valid exercise of the power of Congress to dispose of property of the United States.

34. Under the constitutional power to dispose of property of the United States, the Government may attach to the sale of its property such conditions as it may deem reasonable to insure the widespread diffusion of the benefits of such property and the avoidance of monopolistic control of such property.

35. Under the power to dispose of property of the United States, Congress has the constitutional power to Authorize the Tennessee Valley Authority to include in any contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions with respect to the rates at which such power is to be resold to [fol. 648] the ultimate consumers.

36. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Authority to include in any contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions with respect to the rates at which such energy is to be resold to the ultimate consumers.

37. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the Tennessee Valley Authority to include in all contracts

for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions relating to the bookkeeping and accounting methods to be followed by the purchasers of such power.

38. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to include in all contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions relating to the bookkeeping and accounting methods to be followed by the purchasers of such power.

39. The Tennessee Valley Authority Act does not contain any provisions regulating or attempting to regulate the rates or operations of complainant companies or other private utilities.

40. Sales of power by the Tennessee Valley Authority in accordance with the provisions of the statute at rates fixed and determined by the board of directors do not constitute regulation of the rates or businesses of the complainant companies or other private utilities.

41. The municipalities and cooperatives purchasing power at wholesale from the Authority are subject to regulation by the States.

[fol. 649] 42. The municipalities and cooperatives purchasing power at wholesale from the Authority are authorized under the statutes of the several States in which they are located to purchase said power, to contract with the Authority with respect to the same, and to engage in the business of selling the same at retail.

43. All of the municipalities and cooperatives purchasing power at wholesale from the Authority are authorized by the statutes of the several States in which they are located to enter into contracts with the Authority containing provisions agreeing upon the rates at which such power is to be resold and provisions relating to the bookkeeping and accounting methods to be followed by such purchasers. Under the laws of the several States in which the municipalities and cooperatives are located, such provisions do not constitute any unlawful delegation or abdication of sovereign power by the municipalities or cooperatives.

44. The provisions of the contracts between the Authority and the municipalities and cooperatives purchasing power at wholesale from it relating to the rates at which the power so purchased from the Authority is to be resold and the provisions relating to the methods of keeping accounts do not constitute any invasion of the reserved powers of the States under the tenth amendment to the Constitution of the United States.

45. The provisions in the contracts between the Authority and the municipalities and cooperatives purchasing power at wholesale from it relating to the rates at which such power is to be resold do not in law amount to regulation either of the rates of said wholesale purchasers or of the rates of private companies competing with such wholesale purchasers.

[fol. 650] 46. Under the laws of the several States in which the municipalities and cooperatives purchasing power at wholesale from the Authority are located, the rates at which the power purchased from the Authority may be resold by the municipalities and cooperatives remain subject to the police power of the States, if and when the States may elect to exercise such power.

47. The cooperatives purchasing power at wholesale from the Authority are, under the laws of the several States in which they are located, independent corporate entities and not subsidiaries or instrumentalities of the Authority.

48. The municipalities purchasing power at wholesale from the Authority are, under the laws of the several States in which they are located, independent public agencies of said States and are not subsidiaries or instrumentalities of the Authority.

49. The municipalities and cooperatives purchasing power at wholesale from the Authority are authorized under the laws of the several States in which they are located to engage in the business of selling and distributing electric energy at retail and have the legal right to compete with the complainant companies in such business. Any damage or injury resulting or threatened to the complainant companies, or any of them, from such competition is *damnum absque injuria* and does not give rise to a cause of action on behalf of said companies.

50. None of the complainant companies have or claim any exclusive franchise or right to engage in the business of selling and distributing electricity in the various municipalities and communities in which they operate.

[fol. 651] 51. The sale of electric energy by the Tennessee Valley Authority to municipalities and cooperatives lawfully engaged in the business of selling and distributing said energy at retail does not result in any legal injury to any of the complainant companies and does not invade any legal right of any of said companies.

52. The complainant companies have no standing or right to challenge the right of the municipalities and cooperatives purchasing power at wholesale to engage in the business of selling and distributing electric energy in competition with said companies.

53. The complainant companies have no standing or right to challenge the legal right of the Authority to sell electric energy at wholesale to municipalities and cooperatives engaged in the business of reselling said energy at retail in legal competition with the complainant companies.

54. The complainant companies have no standing or right to challenge the validity of the contracts under which the Authority is selling or has agreed to sell electric energy at wholesale to municipalities and cooperatives engaged in the business of reselling said energy at retail in legal competition with the complainant companies.

55. Having failed to prove any damage in fact, actual or threatened, resulting from the sales of power by the Authority direct to rural customers not previously served by any of the complainant companies, said companies have no standing or right to challenge the legal right of the Authority to make such sales.

56. Having failed to proved any damage, actual or threatened, resulting from the sales of power by the Authority direct to industrial customers not previously served by any of the complainant companies, said companies have no standing or right to challenge the legal right of the Authority to make such sales.

57. The complainant companies have no legal right to be free from competition, and they have no legal standing or

right to challenge the statutory powers of the Authority to generate, transmit, and sell electric energy in competition with them, or some of them.

58. Under the decision of the Supreme Court in the Ashwander case, the right of the Authority to acquire and operate the facilities in Alabama transferred to it under the contract of January 4 is settled and cannot be questioned in this case.

59. Section 7 of the contract of January 4 confers upon the Authority the contractual right to serve municipalities located within the ceded area in Alabama, and the Alabama Power Company, a party to that contract, has no right to question the legal right of the Authority to engage in such service.

60. Section 7 of the contract of January 4 confers upon the Authority the right to sell power to any municipality owning and operating its own distribution system and not purchasing power from the utilities party to that contract, and the complainants Alabama Power Company, Mississippi Power Company, and The Tennessee Electric Power Company, parties to that contract, have no right to challenge sales to such municipalities by the Authority.

61. Section 7 of the contract of January 4, 1934, confers upon the Authority the right to sell power to any customers [fol. 653] not served by the parties to that contract as of January 4, 1934, up to a maximum aggregate demand of 2500 kw., and the complainants Alabama Power Company, Mississippi Power Company, and The Tennessee Electric Power Company have no right to challenge sales of power to customers served pursuant to the right so conferred.

62. The mere operation by the respective complainants of utility properties in the area within 250 miles or any other distance of the respective dams of the Authority constructed, under construction, or recommended for construction is not such a common injury as to give rise to a joint cause of action against the Authority on the part of such complainants.

63. There is a fatal misjoinder of parties complainant in this cause and the suit should be dismissed on that ground.

64. The bill of complaint in this cause is fatally multifarious due to the misjoinder of parties and causes of action, which has been made apparent upon the trial, and the suit should be dismissed upon that ground.

Done at Chattanooga, Tennessee, this — day of January, 1938.

— — —, Circuit Judge. — — —, District Judge.
— — —, District Judge.

[fol. 654] IN UNITED STATES DISTRICT COURT

(Caption omitted)

Decided January 21, 1938

Before Allen, Circuit Judge, and Gore and Martin, District Judges

OPINION—Filed January 24, 1938

ALLEN, Circuit Judge.

Complainants have filed a bill in equity praying for relief against the operation of the Tennessee Valley Authority Act of 1933, as amended (48 Stat. 58; 49 Stat. 1075; 16 U.S.C. 831 et seq.). The bill joins as defendants the Tennessee Valley Authority, the agency created by the Congress to carry out the provisions of these statutes, and Arthur E. Morgan, David E. Lilienthal, and Harcourt A. Morgan, who are the chief executive officers of the Authority and constitute its board of directors.

The complainants are nineteen companies generating, transmitting, and distributing power within Tennessee, Alabama, Mississippi, North Carolina, South Carolina, Kentucky, Virginia, West Virginia, and Georgia, one of which, the Georgia Power Company, has been enjoined from participating in this action by the United States District Court for the Northern District of Georgia (*Georgia Power Co. v. Tennessee Valley Authority*, 17 F. Supp. 769). This decree has been affirmed by the Court of Appeals for the Fifth Circuit (89 F. (2d) 218). For this reason we give no consideration to alleged competition of the Authority with the Georgia Power Company.

The complainants are in general owned by holding companies, as set forth in the findings of fact. They are all taxpayers, citizens of and authorized to do business within the States in which they operate, and none of them claims to operate under any exclusive franchise.

The bill cannot be summarized within the appropriate limits for a trial court's opinion. In addition to its seventy pages of pleading and sixty-five pages of exhibits, it contains [fol. 655] within the bill itself much that is argumentative, repetitious, and immaterial to the legal questions presented. It charges coercion, fraud, and conspiracy on the part of the defendants officially and individually. It charges that Secretary Harold L. Ickes, Public Works Administrator, has joined with the Authority in certain coercion and conspiracy against the legal rights of these complainants. The argumentative matter and conclusions which we deem immaterial are so interwoven with allegations bearing upon the legal questions presented that it is impossible to extricate them. The same statement is true of the prayer. Paragraphs h, i, l, o, p and q of the prayer are considered by the court to have no relation to this case under *Ashwander v. Tennessee Valley Authority*, 297 U.S. 288, which held that such matter presents no justiciable controversy (p. 324). It suffices, therefore, to say that in its essential and material features the bill seeks a decree holding that the Tennessee Valley Authority Act of 1933, as amended, and the acts generally done by the board of directors thereunder and individually violate the Constitution of the United States. It seeks an injunction restraining the defendants, their agents and employees, from carrying out the provisions of the statute with reference to the sale of electric power; from purchasing, constructing, or otherwise acquiring electric generating plants, transmission lines, or distribution lines; or from selling electric energy, except such energy as may be produced at Wilson Dam, "to the extent the production and sale of power at Wilson Dam has been held legal." For practical purposes this bill seeks to enjoin the further construction of TVA dams now in process of construction in the Tennessee Valley, the construction of new dams in such Valley for which specific appropriation has been made by Congress, and the operation for generation and sale of electric power of all TVA dams built and to be built.

[fol. 656] The answer denies the material allegations of the bill. Only one of the affirmative defenses requires special mention. The defendants claim that certain of the complainants are estopped to deny the constitutionality of the TVA statutes because of extensive purchases of power from the Authority. These purchases were made under the contract of January 4, 1934, by which certain complainants contracted with the Authority to transfer to the Authority their plants, lines, equipment, customers, and franchises within certain counties within Mississippi and Alabama for a valuable consideration and upon the condition that the Authority would not operate within those States outside of the counties specified. The properties have been transferred and the contract to date has been fully performed. The court has ruled in favor of the complainants on this contention and has held that the record presents no essential difference from the situation covered by the ruling as to estoppel in the Ashwander case, *supra*, at 323, and therefore this question will not be discussed.

After a trial which consumed about seven weeks, in which approximately 1,100 exhibits were offered, the material issues in the case as briefed, argued, and outlined in the actual testimony are defined as follows:

(1) Whether the Authority is engaged in acts constituting in law malice, coercion, and duress to the injury of complainants.

(2) Whether the Authority and the individual defendants have conspired with Secretary Ickes and the Public Works Administration to induce municipalities and cooperative associations through loan grant agreements from the Public Works Administration to set up their own distribution systems and to coerce them into executing contracts for purchase of TVA power by threat of denial or cancellation of such PWA loan grants.

(3) Whether the acts of the defendants are authorized by the TVA statutes.

[fol. 657] (4) Whether the act itself is unconstitutional and void, and the acts done under it are illegal because the Congress is not empowered either under the interstate-commerce clause (art. I, sec. 8) or under the national-defense powers (art. I, sec. 8) of the United States Constitution to enact the TVA statutes.

(5) Whether the generation of electricity at the TVA dams is unlawful because it is inconsistent with the regulation of interstate commerce, with flood control, with the improvement of navigation on a navigable river, and with purposes of national defense.

(6) Whether the method of disposition of electric energy authorized by the TVA statutes is appropriate and constitutional under the power to dispose of Government property conferred upon the Congress by section 3 of article IV of the Constitution.

Each of the dams constructed, in process of construction, and proposed for the TVA system, while varying somewhat in use, as hereafter set forth, is a unit of an integrated, multiple-purpose project, the system being designed for coordinated use of the full benefits of the river along the line of navigation, flood control, national defense, and power development. Wherever water falls, power is created, and one of the express purposes of the TVA statutes is that hydroelectric power so created shall be sold to assist in liquidating the cost of the project. This is in line with the general development of the conservation movement from 1908 to the present as it relates to streams. See National Waterways Commission Report, S. Doc. 469, 62d Cong., 2d sess., app. I, pp. 27, 52, 61, 82, 85, 87; Statement of Chairman of Federal Power Commission, H. Doc. 395, 73d Cong., 2d sess., p. 54; Report of National Resources Board, pp. 263, 264. Similar provisions on river projects have been embodied in previous legislation. In 1912 a statute [fol. 658] was enacted authorizing the Secretary of War to provide in navigation dams, in order to make possible the economical future development of water power, such foundations, sluices, and other works as may be considered desirable for the development of such power (37 Stat. 233). The Boulder Dam Project Act of 1928 (45 Stat. 1057) provided for a multiple-purpose project for irrigation, flood control, improvement of navigation, and generation of power. As fully appears from the opinion in *Arizona v. California*, 283 U. S. 423, navigation on the Colorado River was negligible in comparison with navigation on the Tennessee River on the record in this case. Though navigation on the Colorado River had ceased, the

project of reclaiming its navigability was held by the Supreme Court to establish the constitutionality of the multiple-purpose project, including the generation and sale of power.

TVA Project

Pursuant to the TVA statute as amended and to subsequent related enactments, the Authority has constructed and is planning to construct seven high dams on the main channel of the Tennessee River and certain dams on its tributaries. The Tennessee River is formed by the confluence of the Holston and French Broad Rivers in the east-central part of Tennessee. It flows southwesterly across the eastern part of Tennessee into Alabama, westerly across the northern part of Alabama, northerly between Alabama and Mississippi, and across the western part of Tennessee and Kentucky, and empties into the Ohio River near Paducah, Kentucky. Its length is 652 miles, and its drainage basin is 40,600 square miles. It has eight principal tributaries. The main-stream dams, including Wilson, which was constructed previous to 1933, are as follows:

[fol. 659] (1) Gilbertsville, on which preliminary investigations are in progress, located in Kentucky about 22 miles from the mouth of the river.

(2) Pickwick Landing Dam, under construction and almost completed, located in Tennessee about 206 miles from the river's mouth.

(3) Wilson Dam, now in operation, constructed by United States Army Engineers and transferred to the Authority under the TVA Act, located at Muscle Shoals, Alabama, about 259 miles from the river's mouth.

(4) Wheeler Dam, construction of which was begun by the United States Army Engineers and completed by the Authority, located in Alabama about 15 miles above Wilson Dam and about 275 miles from the river's mouth. This dam is now in operation.

(5) Guntersville Dam, under construction, located near Guntersville, Alabama, 349 miles from the mouth of the river.

(6) Chickamauga Dam, now under construction, located near Chattanooga, Tennessee, 471 miles from the mouth of the river.

(7) Watts Bar Dam, on which preliminary investigations are in progress, located in Tennessee about 530 miles from the mouth of the river.

(8) Coulter Shoals Dam, on which preliminary investigations are in progress, located in Tennessee 602 miles from the river's mouth.

The tributary dams are Norris, completed and in operation, located in Tennessee on the Clinch River about 79 miles from the mouth of the Clinch and about 647 miles from the mouth of the Tennessee, and Hiwassee Dam, now under construction, located in North Carolina on the Hiwassee River about 75 miles from the mouth of that river and about 560 miles from the mouth of the Tennessee River.

A third tributary reservoir, Fontana, on the Little Tennessee River, is recommended by the Authority, but the [fol. 660] Congress has made no specific appropriation for this suggested dam. While Wheeler and Norris are the only dams built by the Authority which are completed and in operation, they coordinate in use with Wilson at Florence, Alabama. They release water to Wilson and thus aid in the generation of power at Wilson. Wilson Dam was built under the war powers of the Congress, as held in *Ashwander v. Tennessee Valley Authority*, supra. While the validity of Wilson Dam is not and cannot be questioned, its present use in combination with Norris and Wheeler, and its future use in conjunction with Guntersville, Chickamauga and Hiwassee, all of these dams being upstream from Wilson and each being part of an integrated system built for the combined purposes of navigation, flood control, power, and national defense, has immediate bearing on this case.

The importance of the Tennessee drainage basin has been recognized for over a century, and repeated acts of Congress have provided for the canalization of different parts of the river. A canal with locks throughout the length of Muscle Shoals, opened to navigation in 1834, fell into disuse. Another Muscle Shoals canal was completed about 1891. The Rivers and Harbors Act of 1890 provided that the Colbert Shoals section should be improved by a lock and a canal. In 1913 the Hale's Bar lock and dam, completed by private interests, provided a canalization of 33 miles of the river below Chattanooga. The Widow's Bar lock and dam

below Hale's Bar was completed in 1926. Wilson Dam provided a canalized waterway for 15½ miles from Muscle Shoals. Lock No. 1, immediately below Wilson Dam, was completed in 1926.

These projects were, in general, unrelated and uncoordinated. This was the situation when a comprehensive survey of the Tennessee basin was ordered in five successive acts of Congress from 1922 to 1928, resulting in the reports contained in House Document No. 328. This document contained an exhaustive report by the district engineer and [fol. 661] comments thereon, together with recommendations made by the division engineer, the Board of Engineers for Rivers and Harbors, and the chief of engineers. It set forth alternate plans for securing a depth of nine feet in the main stream, that is, an improvement for navigation only, and also a plan for the development of the river and its tributaries for purposes of flood control, navigation, and power. The suggested plan for the improvement of navigation only involved in one of its phases the building of 32 low dams which would provide a nine-foot navigable channel, but would have no value either for flood control or power.

House Document 328

The complainants vigorously assert that House Document No. 328 recommends the low-dam plan, as distinguished from the TVA plan. It is of little assistance in this phase of the controversy to rely only upon the recommendations of the various engineers without studying the text (H. Doc. 328, pp. 1-25). As to the report of the district engineer, of which the chief of engineers said, "There has never been presented to Congress a more thorough and exhaustive study," the Board of Engineers for Rivers and Harbors, in its conclusions on the various projects presented, stated that, "The construction of the storage reservoirs on the tributaries described in this report would have a favorable effect in reducing floods on the Tennessee River and on the lower portions of its tributaries" (p. 23). It declared that, "The improvement of the Tennessee from its mouth to Knoxville by a series of low, movable dams without power development would have practically no effect on floods" (p. 23). It also said, speaking of low-lift dams, that, "Such a waterway would be inferior to the high-dam developments and would not per-

mit the economical development of power" (p. 13). The [fol. 662] board of engineers pointed out that in addition to having no value whatever for flood control, the 32 low dams, though less expensive to construct than the high dams, provided a navigation channel inferior to that of the high-dam plan.

It stated its opinion that the river "has large potential value as a means of transportation and that its improvement to a depth of nine feet would ultimately make it an important feeder to the Ohio-Mississippi system" (p. 20). It concluded that "It is evident that the full utilization of the resources of this river for the public benefit requires its improvement by means of high dams built for the joint development of power and navigation."

These extracts show that consideration of the bare recommendations, apart from the conclusions expressed, is misleading. In the recommendations the division engineer disagreed with the district engineer who drew the report as to his estimate of the amount of benefit to navigation. The board of engineers disagreed on certain points with the division engineer, and the chief of engineers in certain matters disagreed with all of his subordinates. But the projects actually recommended by each of these engineers were not in essential features the same as those embodied in the TVA statutes. They provided for the development of the river by private interests or by a combination of private interests and the Government.

In order to carry out this policy, the Rivers and Harbors Act was passed in 1930 (46 Stat. 918, 927-928), extending to private interests on certain conditions the right to develop the river by a series of high dams in cooperation with the Government. No private interest availed itself of the opportunity, and in 1933 Congress delegated the task to an agency of the Government.

[fol. 663] The program adopted by the Authority, in its main features, and the choice of the sites for the various dams follow the broader multiple-project plan outlined in House Document No. 328 (H. 43), commended by the Board of Engineers for Rivers and Harbors as superior to the low-dam plan. This multiple project contemplated the erection of seven high dams in the main stream (in addition to Wilson, which had already been built) and reservoirs on the tributaries.

Uses of the Dams

The dams on the tributaries, as outlined in House Document No. 328 and as shown in the evidence, are used and to be used for flood control, water regulation, power, and purposes of national defense. Of the completed dams, Norris is so constructed as to be able to retain the entire flood waters of the Clinch in flood season and was, in fact, so operated in 1936 and 1937. In 1936 it averted a probable flood at Chattanooga. It also generates power. Releases of water from Norris in the dry season are now used for regulation of stream flow so as to maintain a seven-foot navigable channel throughout the summer. Similar releases will be necessary until the entire series of main-stream dams as planned has been completed. Wheeler backs the water of the Tennessee into a slackwater pool providing nine-foot navigation to Gunterville. It generates power and has a surcharge usable for flood control. It is uncontradicted that the releases from Norris and Wheeler, and from Hiwassee, Gunterville, and Chickamauga, as planned, create and will create extra head for continuous water power at Wilson and thus aid in the national defense. Cf. *Ashwander v. Tennessee Valley Authority*, *supra*.

Of the dams under construction, Gunterville, Chicka-[fol. 664] mauga, and Pickwick Landing are essential to the maintenance of nine-foot navigation. Each of these dams is equipped with electric generators and has a substantial surcharge usable for flood control. Hiwassee, on a tributary, will be used mainly for flood control and power and for aiding Wilson Dam with water releases at dry season. Until the project is completed it will assist in regulating stream flow, thus improving navigation. Gilbertsville, while authorized by Congress, has only been investigated and surveyed. The plans for this dam have necessarily been delayed because of its size and because of the difficulty of locating suitable rock foundation. It is reasonably estimated that Gilbertsville, when completed, will supply over 4,000,000 acre-feet of flood storage, and it is the most important of the series for flood control on the Ohio and the Mississippi. The Tennessee contributes materially to the flood crest on the Ohio at Cairo. Its flood flow is almost double its drainage area in relation to other feeders of the Mississippi because of the high precipitation in the Tennessee Valley, which varies from 47.5 inches per year at

Knoxville to 51.2 at Paducah on the main stream. The Ohio, with its tributaries, including the Tennessee, is the principal feeder to the Mississippi floods. All of the TVA dams, on both the river and the tributaries, are used, so far as constructed, are planned, as shown by the official TVA reports, and are required under the statute to be employed as an integrated, coordinated system for the combined purposes of navigation, flood control, power, and national defense.

Conspiracy, Coercion, and Unlawful Competition

The bill charges a conspiracy to injure or destroy the complainants' business; to compete unlawfully; to breach the complainants' existing contracts with their customers; [fol. 665] to compel and coerce complainants to sell their plants at distress figures. It charges that the TVA has conspired with and practiced coercion upon municipalities and cooperatives to compel them to set up their own distribution systems for the purpose of selling TVA power at retail. If the record had substantiated the allegations of the bill, grave questions would have been presented. But these allegations have not been established. None of the complainants has sold its property, except those covered by the contract of January 4, 1934, a contract entered into at arm's length and not even challenged by complainants as unfair. Since complainants have not sold, they have not been coerced to sell their properties, and the negotiations for sale presented in this record do not evidence acts deemed coercion under settled legal principles. No malice in law is shown on this record. The motive of officials who execute a law is immaterial, even though accompanied by a wrongful purpose. *Isbrandtsen-Moller Co. v. United States*, 300 U. S. 139, 145.

Unlawful Competition

Neither has unlawful competition been proved. The attempt to show that the Authority has endeavored to persuade complainants' customers to breach their existing contracts for purchase of power from complainants has totally failed. In every case where a customer of the complainants has been lost to the Authority the cause has been, not unlawful competition, but the lawful allurements of substantially lower prices. In every such case the change of relationship has occurred at a time when no contract with any of the complainants was in existence. In fact, it is shown

that the TVA does not serve the complainants' customers with direct service except as to industrials and "ceded areas." Thus the municipalities now served by the TVA [fol. 666] in Tennessee—Dayton, Pulaski, and Dickson—each generated its own power or purchased power at wholesale from a nonutility prior to the time when the TVA started selling them power. The positive statement is made by officers of the Mississippi Power & Light Company, the Franklin Power & Light Company, the Holston River Electric Company, the Birmingham Electric Company, the Carolina Power & Light Company, the Appalachian Electric Power Company, the West Virginia Power Company, the Kingsport Company, the East Tennessee Light & Power Company, the Tennessee Eastern Company, and by the Southern Tennessee Power Company, that the TVA serves neither any of their customers direct, nor any wholesale customer by whom distribution is made to any of these utilities' former customers. The TVA serves certain cities and customers formerly served by the Alabama Power Company, but all of these customers are situated or reside within certain counties called the "ceded area," in which it was contracted in the agreement of January 4, 1934, by the Alabama Power Company, that its lines should be sold to the TVA within that area, and that the TVA should serve within that district and nowhere else in Alabama. The TVA is serving nowhere else in Alabama except within this area. The Mississippi Power Company has made a similar contract with the TVA, and the TVA is not serving outside of the "ceded area" in Mississippi, except to municipalities which previously maintained their own generating and distribution systems. No fraudulent attempt has been made to secure complainants' markets. Whatever compulsion exists is the inevitable compulsion exercised by the fact that a competitor sells at lower rates than complainants. But if the operation of the TVA is legal; the complainants have no legal right not to be subjected to such competition even though it curtail or destroy their businesses. *Alabama Power Co. v. Ickes*, 293 U. S. —, decided January 3, 1938.

[fol. 667] Conspiracy with Public Works Administration

The complainants allege that the defendants have conspired with the Public Works Administration to finance the construction of duplicating distribution lines and systems in various municipalities and cooperatives for the purpose

of using TVA power and selling that power at rates so low as to constitute competition destructive to complainants' business. Numerous contracts are introduced in evidence between the Public Works Administration and municipalities and cooperatives providing for the financing of electrical distribution projects. The power is being sold, or is contracted to be sold to these municipalities and cooperatives at wholesale by TVA.

The facts do not establish a conspiracy. It is not questioned that loans were made within the provisions of the Public Works Administration statute. The validity of that statute is not attacked in this proceeding, and we therefore assume that it is valid. The acts done by Secretary Ickes and his subordinates have been done under the purview of the controlling statute. Their acts are presumed to be valid. Where no fraud, malice, or coercion is shown cooperative action by two groups of public officials in administering the provisions of two statutes does not constitute conspiracy. The decisions relied on by complainants with respect to unlawful concert, plan, or design involve a plan either to commit an unlawful act or to commit acts, otherwise lawful, with the intent to violate a statute or commit an unlawful act. Cf. *Swift & Co. v. United States*, 196 U. S. 375. The acts done by the officials of the Public Works Administration in cooperation with the officials of the TVA, as shown by this record, were done with the intent to carry out the provisions of the Public Works Administration statute; the acts done by the TVA in cooperation with the Public Works Administration were done with the intent to carry out the TVA statute. Intent to execute a valid [fol. 668] and existing law is not evidence of illegality. As to the transactions of the Public Works Administration, no evidence of conspiracy is presented.

Coercion upon Municipalities and Cooperatives

Certain officials and employees of the TVA gave information, counsel, and encouragement to municipalities and cooperatives at the request of such municipalities and cooperatives with respect to the general feasibility of setting up distribution systems for TVA power. The decision on such matters was made by the municipality or cooperative concerned. Under the statutes of Alabama, Tennessee, and Mississippi, hereinafter cited, both municipalities and rural cooperatives are authorized to construct generating plants

and distribution systems for the purpose of creating and distributing electric energy. Georgia has a similar statute concerning cooperatives. These cities and cooperatives were free to obtain information and counsel from any source. In each case the decision of the municipality involved was made either by the citizens at an election, or by its duly elected officers. The decision of the cooperatives involved was made by its lawful representatives. Presentation by the Authority of facts as to TVA rates and contracts for power given to citizens or officers of a city or rural cooperative at their request do not constitute intimidation or coercion.

Damage

The record shows that the sales of every one of these complainants and the proceeds of these sales have reached an all-time high in recent years. Several of the most important complainants recently extended their lines, built new plants, [fol. 669] and acquired new equipment. The Authority concedes that it sells, or intends to sell, power at substantially lower rates—residential, industrial, and rural—than those of the complainants, and that some displacement of service will result. Two hundred and fifty miles is the distance within which electricity can feasibly be transported from each of the dams. As a result of the lower TVA rates, cities which formerly purchased power from some one of the complainants have taken steps to finance the construction of distribution systems, or have negotiated with the power companies to purchase the existing systems of the power companies, in many instances securing financial aid from the Public Works Administration with the express purpose of selling TVA power through the systems thus acquired. The city of Memphis has issued bonds for this purpose, and under the contract which the city has signed with the Authority, the Memphis Power & Light Company will be deprived of its greatest outlet. A similar proposition has been made but not yet carried through in Knoxville. If the arrangement is consummated, the Tennessee Public Service Company and the Carolina Power & Light Company will each be deprived of one of its most profitable customers. A similar situation exists in Chattanooga. The rural cooperatives distribute TVA power, but for the most part they reach areas not formerly served by these complainants. The Monsanto Chemical Company of Alabama discontinued certain of its operations at Anniston, Alabama, heretofore

served by the Alabama Power Company. An affiliated company, Monsanto Chemical Company of Delaware, set up a substitute plant at Columbia, Tennessee, near a source of its raw material, using power purchased from TVA. The Volunteer Portland Cement Company failed to renew its contract with Tennessee Public Service Company and, instead, entered into a contract with the Authority, a contract since assigned to the city of Knoxville.

[fol. 670] In view of the inevitable effect of the lower rates of the TVA within this area and the economic necessity forced upon the complainants of lowering their rates to meet the competitive rates of the Authority, we conclude that the record presents evidence of substantial future damage to these complainants. But such damage constitutes *damnum absque injuria* unless sales of power by the TVA are unlawful. *Alabama Power Co. v. Ickes*, *supra*.

We find in this record no coercion, conspiracy, malice, or fraud on the part of the defendants. None existing, the operation of the Authority is lawful unless (1) the defendants are exceeding their statutory authority, or (2) the statute is unconstitutional.

Compliance with the Statute

Section 9a of the statute reads as follows:

The Board is hereby directed in the operation of any dam or reservoir in its possession and control to regulate the stream flow primarily for the purposes of promoting navigation and controlling floods. So far as may be consistent with such purposes, the Board is authorized to provide and operate facilities for the generation of electric energy at any such dam for the use of the Corporation and for the use of the United States or any agency thereof, and the Board is further authorized, whenever an opportunity is afforded, to provide and operate facilities for the generation of electric energy in order to avoid the waste of water power, to transmit and market such power as in this Chapter provided, and thereby so far as may be practicable, to assist in liquidating the cost or aid in the maintenance of the projects of the Authority.

It is the principal contention of the complainants that this statute is a sham, pretense, and fraud, and these dams as built and planned cannot and will not be operated within

the statute. We therefore consider the actual operation of the dams.

In Water Bulletin No. 1, dated June 30, 1936, adopted by the TVA Board, it was ordered that the reservoirs of the [fol. 671] Authority be operated, "First, to serve as navigation channels and maintain navigation depths in the reaches of the river below the reservoirs; and Second, to reduce the magnitude of flood peaks below. Requirements for the control of malaria and temporary needs of construction shall be given due consideration. So far as consistent with the above procedure, as much water power available at the dam shall be converted into electricity as is feasible."

The complainants contend that this order is a sham, and that none of the dams can be or will be operated in compliance therewith. They direct a particular attack upon Norris, which is now completed and in operation. However, Water Bulletin No. 2, dated June 30, 1936, ordered that until further notice water be released from Norris reservoir so as to maintain, as nearly as may be, a constant flow at Florence, Alabama, of 15,000 c.f.s. The evident purpose was to maintain a constant and sufficient stream flow for Wilson Dam. This and succeeding water bulletins, which are in evidence, outlining the same general policy, have for one of their main purposes the increase of continuous water power at Wilson. Hence, operation of the dams above Wilson is clearly constitutional under the national-defense powers of the Congress.

With reference to the general operation, a resolution of the TVA Board, adopted July 1, 1936, created a committee on water control operations, consisting of the chief water control planning engineer and the chief electrical engineer, which committee was and is authorized to prepare general regulations as to the control of water through the operation of reservoirs. The regulations are transmitted to the general manager in the form of bulletins, and at times of flood or emergency, oral instructions are also given. Woodward, the chief water control planning engineer, testified that he prepares these bulletins and that none is issued without [fol. 672] his approval. He stated that he was guided in his operations by the statute, and that the constant flow of 15,000 c.f.s. was maintained at Florence, Alabama, for the purpose of securing the necessary navigable depth in the river. Karr, electrical engineer at Norris, testified that

if the limited instructions given to him for operation were such that he had either to violate the instructions or to leave a city without power, "someone would have to go without power temporarily." Woodward testified that he permits the use of the water for power, and in special cases, if extra water is wanted, it is given extra consideration. It is uncontroverted that the water control planning engineer is in direct charge of the regulation of water flow, and also that he regulates water flow from Norris primarily for navigation and flood control.

It appears that in actual operation there is a seasonal drawing down of Norris Dam so that extra storage space may be available during the flood season. Norris was actually operated during the flood of 1937 to reduce the crest on the Tennessee River and to reduce the crest on the Ohio at Cairo. The complainants' expert Kurtz was familiar with the fact that Norris was so operated. Power is produced at Norris. The defendants introduced detailed testimony as to the full amount of TVA power presently produced, the available facilities for generation, the possibilities for future generation, the present load, and the load now contracted for.

Complainants urge that the estimated future TVA load set forth in the various TVA reports and the load it may reasonably be expected to acquire because of its substantially lower rates will demand that the dams built and to be built be operated in violation of the statute and not (as required in section 9a) in the primary interest of navigation and flood control. But this point is completely refuted by the [fol. 673] numerous TVA contracts which are in evidence and are described in the findings of fact.

These contracts generally contain a clause relieving the Authority of any obligation to supply power when prevented by fire, accident, breakdown, act of God, or any other causes beyond the Authority's control. Substantially all of these contracts contain the following provision: "Subject to the provisions of the Tennessee Valley Authority Act of 1933, as amended, the parties hereto agree as follows . . ."

Under the familiar rule, this provision reads the statute, including its mandatory requirement that the dams and reservoirs be operated primarily for flood control and navigation, into every one of these contracts. Under the contracts with the Arkansas Power and Light Company, the Victor Chemical Works, the Aluminum Company of Amer-

ica, dated July 20, 1937, and with the Electro Metallurgical Company, which are contracts both for firm and secondary power, the Authority is expressly relieved of obligation to supply power when service is interrupted or suspended by reason of floods or backwater caused by floods.

Reading these contracts in conjunction with the statute and the general resolution governing water control above described, it is evident that the long-term contracts of the Authority strongly corroborate (1) the sincerity of the resolution and water bulletins establishing the system of water control in the interest of flood control and navigation; (2) the testimony of Woodward and Karr; (3) the uncontradicted facts as to the principles applied in the actual operation of the dams. The overwhelming weight of the testimony supports defendants' contention that the mandatory provision of the statute that navigation and flood control be given primary consideration both at the other dams, built and planned, and at Norris Dam, is at all times scrupulously followed and that the statute is neither violated nor exceeded.

[fol. 674] Constitutionality of TVA Statute Must be Determined

Since no fraud, coercion, conspiracy, or malice is shown, and since the Authority has acted within the provisions of the statute under consideration, unless the statute itself is unconstitutional the dams are lawfully erected, the energy is lawfully created, and the water power is the property of the United States. *Ashwander v. Tennessee Valley Authority*, supra. It therefore is essential to the decision of the case pleaded in the bill to determine the constitutionality of this statute.

The Statute

The complainants contend that the statute was enacted primarily for power purposes and that flood control, navigation, and national defense are incidental and merely a cloak for the unlawful purpose of permitting the Government to enter the power business. The defendants contend that the statute was passed and that dams were erected and are under construction, or were authorized, for the purpose of combined flood control, navigation, and national defense; and that the installation of generators, the creation of

power, and its sale have been authorized by the Congress as an incident to the exercise of constitutional powers.

National Defense

Article I, section 8, subsection 1 of the Constitution of the United States provides that the Congress shall have power "to provide for the common defense and general welfare of the United States."

In pursuance of this power it may make all laws which shall be necessary and proper for carrying into execution [fol. 675] the national-defense powers. An express purpose of the Tennessee Valley Authority Act is that of maintaining the properties owned by the United States in the vicinity of Muscle Shoals, Alabama, in the interest of national defense. The amended Tennessee Valley Authority Act, title 16, U.S.C.A., section 831p, provides that

The Secretary of War, or the Secretary of the Interior, is hereby authorized to construct . . . a dam in and across Clinch River in the State of Tennessee, which has by long custom become known and designated as the Cove Creek Dam, together with a transmission line from Muscle Shoals, according to the latest and most approved designs, including power house and hydroelectric installations and equipment for the generation of power, in order that the waters of the said Clinch River may be impounded and stored above said dam for the purpose of increasing and regulating the flow of the Clinch River and the Tennessee River below, so that the maximum amount of primary power may be developed at Dam Numbered 2 and at any and all other dams below the said Cove Creek Dam"

In compliance with this provision, Norris Dam was built and is being operated to create extra head of water power at Wilson Dam. This means that constitutional authority to construct Norris exists, in addition to the congressional power to authorize the construction of this dam under other clauses of the Constitution of the United States.

Navigation and Flood Control

The Constitution of the United States, article I, section 8, provides that the Congress shall have power to regulate interstate commerce. Commerce includes navigation. Gib-

bons v. Ogden, 9 Wheat. 1. Congressional control of navigable waters embraces flood control.

The statute, on its face, repeatedly stresses navigation and flood control. The purpose clause of the act reads:

To improve the navigability and to provide for the flood control of the Tennessee River; to provide for reforestation and the proper use of marginal lands in the Tennessee Valley; to provide for the agricultural and industrial development of said Valley; to provide for the national defense by the creation of a corporation for the operation of Government properties at and near Muscle Shoals in the State of Alabama, and for other purposes.

[fol. 676] The first paragraph of the enactment creates the Authority for the purpose of maintaining and operating properties owned by the United States in the vicinity of Muscle Shoals in the interest of the national defense and "to improve navigation in the Tennessee River and to control the destructive flood waters in the Tennessee River and Mississippi River basins." The Board of the Authority is given power (sec. 4 (j)) . . .

To construct such dams and reservoirs in the Tennessee River and its tributaries, as in conjunction with Wilson Dam, and Norris, Wheeler, and Pickwick Landing Dams . . . will provide a nine-foot channel in the said river and maintain a water supply for the same, from Knoxville to its mouth, and will best serve to promote navigation on the Tennessee River and its tributaries and control destructive flood waters in the Tennessee and Mississippi River drainage basin . . . Other sections in which the purposes of navigation and flood control are stressed are sections 13, 18, 23, and 26a. The most important section is 9a, heretofore quoted, which governs the operation of any dam or reservoir in the possession and control of the board and requires the board to regulate the stream flow primarily for the purposes of promoting navigation and controlling floods. Numerous specific provisions of the statute relate to the generation and sale of electric power for the purpose of assisting in liquidating the cost of these projects, but all of them are limited and controlled by this general provision in section 9a.

Under the statute, therefore, the generation of electric energy is specifically required to be incidental to the exercise

of constitutional powers under the interstate commerce clause, and the operation complies with this requirement. The record shows that the dams are adapted by their construction to combined use for flood control and improved navigation, and to generate electricity. All experts agree that the pondage at each of the dams on the main river and also at the storage dams on the tributaries can be [fol. 677] drawn down, and that space thereby made available is capable of being used to store flood waters in the rainy season. It appears from the uncontroverted testimony that the erection of the main-river dams will create a nine-foot navigable channel. We find from the weight of the evidence that Norris has been used for the purpose of controlling floods. These facts are not controverted except by opinion evidence.

Certain expert witnesses, in answer to hypothetical questions, stated that the dams might be operated for the primary purposes of power. Thousands of pages of testimony and numerous exhibits were introduced to show that Congress might have adopted a better plan than the TVA unified system. Experts equally qualified testified to the contrary.

The court is of opinion that the relative value of these various plans is immaterial since it has been established that the TVA project is reasonably adapted to use for combined flood control, navigation, power, and national defense, and that in actual operation the creation of energy is subordinated to the needs of navigation and flood control.

In short, the contention that the statute and the unified project authorized therein are a sham and pretense is without foundation. It cannot be disputed that the river is navigable and that it occupies a strategic position with relation to floods, both within its own drainage area and on the Ohio-Mississippi. We are not at liberty to conclude that the river is not susceptible of development as an important waterway nor that it cannot be regulated so as to assist substantially in the control of floods in the alluvial valley of the Mississippi, as well as practically eliminating local floods on the Tennessee River. *Ashwander v. Tennessee Valley Authority*, supra. Norris will create additional power for use for purposes of national defense at Wilson. Hence we are not at liberty to conclude that the

[fol. 678] Congress has not undertaken this specific development for purposes within its constitutional powers nor that the construction of these high dams and reservoirs along the lines proposed is not an appropriate means to accomplish these legitimate ends. Cf. *Ashwander v. Tennessee Valley Authority*, supra. The dams and their power equipment, both constructed, under construction, and authorized, must be taken to have been authorized, constructed, and planned in the exercise of the constitutional functions of the Government.

Interference with States' Rights

Complainants contend that the TVA statutes constitute an unlawful interference with the police power of the States because they regulate the rates of utilities which, themselves, are subject to State regulation. The statute does not fix nor purport to fix the complainants' rates. But the contention is that the lower rates of the TVA will inevitably force complainants to lower their rates, and also that the TVA in its operations is not subject to the police power of the State.

The Authority operates within four of the nine States in which these complainants do business, namely, Tennessee, Alabama, Mississippi, and Georgia, its contracts with cities and cooperatives in Tennessee, Alabama, and Mississippi being authorized by express legislation. All municipalities in these three States have the statutory power to own and operate electric distribution systems. General Laws of Mississippi (1936) ch. 185; Carmichael Act, Alabama Code sec. 2001 (1) et seq.; Public Acts of Tennessee (1935) ch. 32; Tennessee Code sec. 3708 (1) et seq. In Mississippi, Tennessee, and Alabama municipalities are expressly authorized to contract for TVA power and to make agreements with TVA as to resale rates. Ch. 271, General Laws of Mississippi (1936); ch. 37, Public Acts of Tennessee [fol. 679] (1935), Tennessee Code sec. 3708 (96) et seq.; Alabama Code sec. 687 (62). In Mississippi, Tennessee, and Alabama nonprofit membership corporations, such as rural cooperatives, may operate electric systems, purchase from TVA, and make contracts as to resale rates. This is also true in Georgia, where the North Georgia Membership Corporation is alleged to compete with the Tennessee Electric Power Company. Ch. 184, General Laws of Missis-

issippi (1936); ch. 231, Public Acts of Tennessee (1937), which is an amendment of the Electric Membership Corporation Act of 1935; Alabama Code sec. 687 (18) et seq.; Georgia Laws (1937) p. 644.

The Supreme Court of Alabama has upheld the validity of the Carmichael Act (sec. 2001 (1) et seq., Alabama Code) in *Oppenheim v. Florence*, 229 Ala. 50, 155 So. 859. The similar act relating to cooperatives was sustained by the Supreme Court of Alabama in *Alabama Power Co. v. Cullman County Electric Membership Corp.*, 174 So. 866. In Tennessee the supreme court has upheld the right of the cities of Memphis and Chattanooga to buy TVA power and to establish their own electric systems under special laws. *Memphis Power & Light Co. v. Memphis*, December term, 1936; *Tennessee Electric Power Co. v. Chattanooga*, December term, 1936; *Tennessee Public Service Co. v. Knoxville*, 170 Tenn. 40.

The actions which the complainants attack are authorized by the States themselves. It is strange doctrine that acts authorized by a sovereign state constitute interference with its sovereign rights because of the fact that they are also authorized by the Federal Government. We think that deliberate cooperation between the State and the United States, authorized in each case both by the State legislature and by the Congress, constitutes no abdication of any state right.

Moreover, no State has intervened as a party in this proceeding to protest that its laws are violated by the TVA, and [fol. 680] no regulatory commission is a party to this action. These complainants are not authorized to object on behalf of the states. *Georgia Power Co. v. Tennessee Valley Authority*, 14 F. Supp. 673, 676. Questions of the conflict of the TVA statute with the sovereign power of the states are not properly raised until the interested parties are before the court. *Georgia Power Co. v. Tennessee Valley Authority*, *supra*. The TVA statutes do not violate either the ninth or the tenth amendment to the Constitution of the United States.

Since the United States has acquired these dam sites legally, the water power, the right to convert it into electric energy, and the energy produced constitute property belonging to the United States (*Ashwander v. Tennessee Valley Authority*, *supra*). This electric energy may be rightfully disposed of by the United States, through the

action of the Congress, under section 3 of article IV of the Constitution of the United States (*Ashwander v. Tennessee Valley Authority*, *supra*). Since floods frequently recur and the needs of navigation are continuous, hydroelectric power generated at dams which control floods and improve navigation is continuously created, and the Government may adopt any appropriate constitutional means of disposing of the property. It is not limited in such disposition to a few, or to infrequent transactions. This is the inevitable logic of the *Ashwander* decision, *supra* at 315, in which every kind of electric facility, many miles of distribution and transmission lines, and continuous and permanent operation were called in question because the contract attacked in that case was the contract of January 4, 1934, in which certain of these complainants, for valuable consideration, ceded sixteen counties to the TVA for electric service.

While the Government in selling its property performs many functions that would be performed in the operation of a private business trading in similar property, inasmuch as the energy sold is created at dams lawfully erected within [fol. 681] the federal power, the Government in performing these functions is not entering into private business. It is merely using an appropriate method of disposing of its property.

The Government may sell land belonging to the United States in competition with a real estate agency, carry parcels in competition with express companies, and manage and control its thousands of square miles of national parks even as a private company. The Government has an equal right to sell hydroelectric power, lawfully created, in competition with a private utility. There is no constitutional authority which denies the Government the right to seek a wider market (*Ashwander v. Tennessee Valley Authority*, *supra*), and the transmission and distribution lines erected are a proper facility for conveying the property of the United States to the market. The creation of the Authority is appropriate. The disposition of the energy is continuous and constant, and it is appropriate that a continuing agency be created in order to carry out this legitimate federal function.

We conclude that since none of the complainants claims to operate under an exclusive franchise, no fraud, malice,

coercion, or conspiracy exists; since the Authority is not exceeding its statutory powers and since the statute is constitutional, the competition with these complainants is lawful. It follows that the holding in *Alabama Power Co. v. Ickes*, supra, recently decided, squarely applies. These complainants have no immunity from lawful competition, even if their business be curtailed or destroyed.

[fol. 682] A decree will be entered denying the injunction sought, dismissing the bill of complainants, and taxing costs against the complainants. Findings of fact and conclusions of law will be filed.

.

(S.) Florence E. Allen, U. S. Circuit Judge. (S.)
John J. Gore U. S. District Judge. (S.) John D.
Martin, U. S. District Judge.

[File endorsement omitted.]

[fol. 683] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER OVERRULING COMPLAINANTS' MOTION TO STRIKE AND
DISREGARD DEFENDANTS' BRIEFS—Filed January 24, 1938

The Court having considered complainants' motion to strike from the files the defendants' explanatory comments on complainants' requested findings of fact, defendants' explanatory comments on defendants' requested findings of fact, and the defendants' supplementary brief responsive to questions of the court during closing argument, overrules the motion.

Complainants except to the overruling of their motion to strike.

(S.) Florence E. Allen, U. S. Circuit Judge. (S.)
John J. Gore, John D. Martin, U. S. District
Judges.

[fol. 684] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER REGARDING SUBMITTED FINDINGS OF FACT AND CONCLUSIONS OF LAW—Filed January 24, 1938

This case came on to be heard, upon the motion of counsel for both parties that the court adopt certain proposed findings of fact and conclusions of law, filed in the case. The court has heretofore directed counsel to append to their proposed findings of fact the name of the witness, the page of the record, and the exhibit relied upon as basis of the finding proposed. This has been done by both parties.

The court makes the following findings of fact:

(1) Findings of fact offered by complainants; numbered I (1, 2, 3, 4, 5); II (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23); III (24); IV (25); V (26, 27); VI (28); VIII-D (2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 15, 20, 21); VIII-E (28, 31, 37); VIII-F (4, 6, 11, 16, 17, 26, 32, 56); IX-A (4 4¼); IX-D (17, 19, 20); X-A (1, 2, 5, 6); X-B (7, 8, 9); X-D (15, 16, 17, 18, 19);

[fol. 685] (2) Findings of fact offered by defendants, numbered 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182.

Complainants except to the adoption, singly and as a series, of every one of the findings of fact proposed by the defendants. The defendants except to the adoption, singly and as a series, of every one of the findings of fact offered by complainants, with the exception of findings of fact numbered 1 to 28, offered by complainants, embodied in pages 1 to 32 of the proposed findings of fact.

[fol. 686] The following requested findings offered by complainants are rejected: VII (29, 30); VII-A (1, 2); VIII-B (1); VIII-C (1); VIII-D (1, 11, 12, 13, 16, 17, 18, 19); VIII-E (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 32, 33, 34, 35); VIII-F (1, 2, 3, 5, 7, 8, 9, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 57); VIII-G (1); IX-A (1, 2, 3, 4½); IX-B (5, 6); IX-C (7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 16¼, 16½); IX-D (18, 21, 21½); X-A (3, 4); X-B (10); X-C (10, 11, 12, 13); X-D (14); X-E (20, 21, 22, 23); X-F (24, 25, 25½, 26, 26½, 27, 28); X-G (29, 30, 31, 32); XI (1, 2, 3, 4, 5, 6, 7, 8, 9, 9½, 10); XII (a, b, c, d, e);

Finding of fact numbered 28, offered by defendants, is rejected.

Complainants object to the rejections, singly and as a series and considered together with their proposed findings of fact which have been adopted, of every one of their above-listed findings of fact. The defendants except to the rejection of their proposed finding of fact.

[fol. 687] The court amends the following proposed findings of fact, and adopts them, as amended:

(1) Complainants' VIII-E (36) by adding the following sentence thereto: "This method of operation is entirely consistent with the operation of dams primarily for navigation and flood control."

(2) Defendants' proposed finding No. 1, by striking out the second sentence thereof with references appended thereto.

(3) Defendants' proposed findings No. 18, p. 15, amended by inserting the word "certain" before the words "low dams" in the second line thereof.

(4) Defendants' requested finding No. 4, p. 4, is amended by striking out the entire second sentence therein, together with all references to pages and exhibits thereto appended.

(5) Defendants' requested finding No. 31 is amended by striking out the words "now out-moded" in the ninth line; by striking out the words "without adequate overdepth" in the tenth line, beginning at the comma in the thirteenth

line, by striking out the words "but this sum is wholly inadequate to provide a modern fixed dam navigation channel with adequate over-depths (Barker) 4727-4731."

(6) Defendants' requested finding No. 96 is amended to read as follows: With the exception of small industrials in the 'ceded areas,' all power contracts except one contain either the following provision immediately after the recitals: "Now therefore, subject to the provisions of the Tennessee Valley Authority Act of 1933, as amended, the parties hereto agree as follows" (contracts re-printed in Comp. Ex. 118, Def. Ex. 154), or an identical provision except that the word "pursuant" is used in the first line above quoted instead of the word "subject."

The court makes the following finding of fact:

Substantial future damage to complainants will result from competition with TVA. This record does not establish that complainants, or any of them, will have their business destroyed by; nor will become bankrupt because of, such competition.

[fol. 689] GORE, J. is of opinion that in addition to the findings of fact filed by complainants, which have been agreed to by all members of the Court, the following should also be adopted:

VII 29 and 30. VIII (a) -1-but omitting the following "This was and still is the existing Federal Navigation Project on the Tennessee River and" and adding, just after the word "and" the word "These." -2. VIII (b) 1-VIII (c) 1-VIII (d) 1-11 (add at the bottom of No. 11, "no appropriation has yet been made by Congress for construction of this dam." -12-13-16-17-18-19.

VIII (e) -2-3-4-5, but add at the end "When the TVA plan is completed:" 6-7-8-9-10-11-12-13-14-15-16-18-20-21-22-23-24-25-26-27-29-30-32-33-34.

VIII (f) 1-2- (It is not proposed by the TVA to improve navigation on the Mississippi River) 5- 7-8 (strike out of No. 8 the words "the effect would be uncertain and negligible") 9-12-13-14-15-18-19-20-21-22-23-24-25-27-28-29-30-31-33-34-35-36-37-38-39-40-41-42-44-45-46-50-51-52- (strike out of No. 52 the words "the construction of the reservoirs un-

der the TVA Unified plan will destroy a large part of the Valley Storage of the Tennessee River basin") 53-55-57-

IX (a) 1-2-3-4 $\frac{1}{2}$ IX (b) -5- IX (c) 7-8-9-10-11-12-13-14-15-16-16 $\frac{1}{4}$ -18-19-20-21-

X (a) 3-4- X (b) 10- X (c) 10-11-12-13- X (d) 14- X (e) 21-22- X (f) 24-25-25 $\frac{1}{2}$ -26- (strike out the following in 26 "Mississippi Power & Light Company sold electricity to the Government Engineering project at Sardis, Mississippi, until the transmission line from Pontotoc, Mississippi, to the project over which TVA electricity is transmitted was constructed." 27-28- X (g) 29-30-31-32.

XI 1-2-3-4-5-6-7-8-9-9 $\frac{1}{2}$ -10.

XII (a), (b), (c), (d), (e).

[fol. 690] GORE, J. concurs in the conclusions reached by Judges Allen and Martin in the adoption of the following numbered findings of fact proposed by defendants, with the modifications listed thereon, and thinks all other findings of fact proposed by defendants should be rejected.

1. and strike out the words "such high dams are the only possible projects to provide a 9 ft. navigation channel on the Tennessee River and control destructive floods in the Tennessee and lower Mississippi basin by means of dams in the Tennessee River system."

2. (Strike out the words "With adequate overdepths for boats of 9 ft. drafts.")

(3) (4) (except strike out the words "The dams of the Authority are the type of projects described in that report as best adapted for comprehensive development of the Tennessee River System navigation, flood control and conservation of water power reservoirs") (5) (except to add that the Norris Dam has elements of design reasonably required for navigation from the dam to the mouth of the Clinch River, the flood control storage in the reservoir is very limited.)

7-8-11-12-13-14-16. (Add after the word "navigation" (Except the dams on the tributaries."))

17. That portion of 17 which states that the high dam will provide superior channel depths and width resulting

in fewer lockages resulting in time consumed in lockages, is adopted, but the remainder of 17 is rejected.

20-21-24. (I will adopt that portion of 25 where it is stated by witness Clemens that the levies on the lower Mississippi have reached the particular limits of heights that the proof shows that for the most effective flood control in the Mississippi reservoirs should be located at or near Cairo which is at the junction of the Ohio and Mississippi Rivers.)

26. (I did not understand that Mr. Clemens stated that the most effective means of reducing flood storage in the Mississippi was by a system of high dams "such as the projects of the Authority" on the main streams, and storage dams on the Clinch and Hiawasse Rivers.)

[fol. 691] 27-28 is supported by opinion testimony. Strike out the following: "The projects of the authority described in finding 2 if in operation during past floods in the Tennessee River basin, could have eliminated or substantially reduced all past floods at Chattanooga for which the available records are adequate to make reliable estimates of possible reduction and will reduce or eliminate all moderate floods of the future. And the Authority's projects, in combination with one reservoir on the Little Tennessee, one on the Holston, and one on the French Broad Rivers would sufficiently reduce the magnitude of all probable future floods so as to make feasible the construction of the necessary local protection works by the City of Chattanooga. Such reductions will be of substantial value in the control of floods in the Tennessee Valley."

29-31-32. (Erase the words "and is valuable on both tributaries in order to preserve the life of the projects by affording capacity for the deposit of silt," and "the projects of the authority will also provide substantial storage space above slackwater pool level to control in whole or in part the run-off from the drainage area above the dams during the flood season." and "such projects are the only engineering works which can provide effective flood control in conjunction with the continuous maintenance of the nine-foot channel for navigation.")

33. (Erase the word "substantially" in the second line and also the words "in combination with the maintenance of a nine-foot navigation channel", and "these tributary

reservoirs will also serve to increase materially the navigable depths in the unimproved portions of the main stream for navigation."

35. In the 7th line between the words "being" and "operated" interline the words "now, but this will not be necessary after the completion of Pickwick and Guntersville Dams."

36-37. (Except eliminate the words "to prevent a probable flood at Chattanooga in the year 1936".

38-40-41. (But erase "the available sites on the Tennessee River System for the construction of dams and reservoirs [fol. 692] are strictly limited in number," and the utilization of such sites exclusively for local flood protection would preclude the development of the water resources for any other purposes."

42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58 - 59 - 60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80- : 62 to 80 inclusive, do not state the full contents of the contracts; the provisions of the contracts are set out in requested findings of complainants, — to —.

81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97. Again defendant's request for finding of fact 95 to 97 inclusive purport to detail a portion of the terms of the contract, but same are given in full, see complainants' requested findings — to —.

98-99-100-101-102-103-104-105-106-107-108-109-110-111-113-114. (Erase "such lines were constructed for service to the customers under contract and not for any strategic purpose of injuring or threatening the complainants." This is a selfserving declaration.)

115-116-117-118-119-120-121-124. Strike out "and 2 private utility companies, see complainant's Ex. 375, Rankin 2427", and also strike the last sentence in this request reading "in addition, the Authority sold substantial quantities of power to the Commonwealth and Southern Companies in January and February under an extension of the contract of January 4, (def. ex. 147, sheet 7").

125-126-127-128-129-130-131-132-133-134-135-136- 137 - 138-141-142. (Except erase "The Authority has sold substantial

blocks of power to many municipalities which formerly operated their own municipal generating plants.”)

147-149-150-151-152-153-156-157-158-159-160-161- 162 - 163. (Add “the proof abundantly shows that complainants have adequate facilities for supplying the needs—have always had adequate facilities and are prepared in the future to install additional facilities necessary to take care of future needs.”)

165-166-167-168-170-171-172-173-174-175. (Except erase beginning in line 3, “and the injury to the respective com-[fol. 693] plainants from any extension of rural lines for service to this market the Authority or municipalities or cooperatives purchasing power at wholesale from the Authority would also be negligible.”)

176. (Erase the last paragraph which reads: “All power purchased by the Alabama Power Company and the Tennessee Electric Power Company from and after the respective dates of completion of Norris and Wheeler Dams was supplied from an interconnected pool, including the power generated at both of said dams from and after the date of completion.”)

178-179-180-181-182.

[fol. 694]

Conclusions of Law

The complainants have offered no proposed conclusions of law.

The court adopts the proposed conclusions of law offered by the defendants numbered 1 to 61, inclusive. The court rejects defendants’ proposed conclusions numbered 62, 63, and 64.

The court makes the following conclusions of law:

Under the record, the complainants have no legal right, within the areas served by them respectively, to exclude lawful competitors from the power markets of the future.

The complainants except to the adoption of each and every conclusion of law listed above, both singly and as a series.

The defendants except to the rejection of their proposed conclusions of law numbered 62, 63, and 64.

GORE, J., thinks the conclusions of law are fully stated in the opinion, therefore there is no reason for adopting the conclusions of law proposed by defendants in connection with their proposed findings of fact.

Florence E. Allen, United States Circuit Judge. John J. Gore, John D. Martin, United States District Judges.

[fol. 695] IN UNITED STATES DISTRICT COURT

(Caption omitted)

FINAL DECREE—Filed January 25, 1938

This suit came on for trial and final hearing before a special three-judge court composed of the Honorable Florence E. Allen, Judge of the United States Circuit Court of Appeals for the Sixth Circuit, the Honorable John J. Gore, Judge of the United States District Court for the Middle District of Tennessee, and the Honorable John D. Martin, Judge of the United States District Court for the Western District of Tennessee, said court having been organized pursuant to the act of August 24, 1937, (Public No. 352, 75th Cong., 1st sess.), and the said three Judges having been duly designated by the Honorable Charles H. Moorman, Senior Circuit Judge of the United States Circuit Court of Appeals for the Sixth Circuit, to hear and determine these cases, the case being heard upon the testimony of the witnesses and all the evidence as reported in the transcript, and the Court, having fully considered the same and the law applicable thereto and being of the opinion that no cause of action has been established and that the suit should be dismissed.

It is Hereby Ordered, Adjudged, and Decreed that the bill of complaint and all amendments thereto be and the same are hereby finally dismissed, and all prayers for relief contained in said bill of complaint, as amended, are denied. The costs of this proceeding are hereby assessed against the complainants, to all of which the complainants duly reserve their exceptions.

Approved for entry.

Florence E. Allen, Circuit Judge. John J. Gore, District Judge. John D. Martin, District Judge.

O. K. as to form. Charles M. Seymour, for Complainants.

[fol. 696] IN UNITED STATES DISTRICT COURT

(Caption omitted)

MOTION TO DISMISS SUIT AS AGAINST GEORGIA POWER COMPANY
WITHOUT PREJUDICE—Filed February 7, 1938

Now comes the Georgia Power Company, one of the complainants in the above entitled cause, and moves this

Court to approve and enter the order, draft of which is attached hereto.

Georgia Power Company, by Baker, Hostetler, Sidlo & Patterson, Its Solicitors.

I certify that a copy of this motion has been delivered to opposing counsel.

Charles D. Snapp.

[fol. 697] IN UNITED STATES DISTRICT COURT

(Caption omitted)

GEORGIA POWER COMPANY'S PETITION FOR REHEARING—Filed
February 7, 1938

To the said Court:

Your petitioner, the Georgia Power Company, one of the parties named as complainant in the original Bill of Complaint respectfully shows:

1. Pending this cause, and before the hearing on the motion for preliminary injunction, this company was, by the Federal Courts in the Fifth Circuit, enjoined from further prosecuting this cause toward the obtaining of any injunction against the defendant operating in the State of Georgia, as appears by the records and files of this case.

2. At the opening of the final hearing before the three judge court, counsel for complainants stated in behalf of this company that, duly respecting the injunction, this company would take no part as a party complainant in the trial and hearing. This was at all times fully understood by opposing counsel and by all members of the court.

[fol. 698] 3. Repeatedly and continuously during the trial, the court excluded evidence offered by the other complainants if and in so far as it pertained especially to the rights of this company or the damage which would be inflicted upon this company by the acts and conduct of the defendants, all as appears by the report of the proceedings of the trial.

4. In recognition of the fact that this company was not acting and could not act as a party complainant, and in substantial effect was not a party complainant, the court, by the presiding Judge, expressly declared, as

appears by the stenographer's record of the trial on page 1643, "The Georgia Power Company is not a party to this hearing and cannot pray for any relief here."

5. In this situation it became the duty of the court on its own motion to dismiss this company out of the case as a party complainant and not to enter any decree on the merits against this company in a case in which it had not been allowed to be heard.

6. This company and its counsel, appearing at the trial for it only by way of the disclaimer above stated, did not suppose that any decree would be asked or ordered in form which might even seem to be a final adjudication on the merits against this company, and it did not occur to this company or its counsel, when served with a copy of the decree as entered on January 25, that the decree would have that effect or could be so considered.

7. This company and its counsel during the trial, and particularly after the declaration by the court that this company was not a party, had regarded this company as practically dismissed from the case and had so understood and interpreted the action of the court. This company is informed and believes that counsel for the defendants had the same understanding of the situation.

8. Immediately after January 25 this company's counsel, acting as counsel for the other complainants in examining the matter of proposed appeal, and thinking of the necessity of a severance of this company under the Supreme Court rules on that subject, first observed that the decree did not recite this company's dismissal from the case and might be thought of, by one who had not examined the record, as a decree on the merits against this company,—although this company is not named in the decree as a party complainant whose Bill of Complaint it dismissed. In the decree the complainants are named only as "Tennessee Electric Power Company, et al."

9. This company by its counsel immediately conferred with defendants' counsel and an agreement was reached that an order nunc pro tunc dismissing this company from the case should be entered as of a day before the entry of the final decree. The form of order so agreed upon and of a motion for the entry of the same are hereto attached, marked Exhibits 1 and 2.

10. The motion and order so prepared were, at the request of the presiding Judge, delivered to her residence at Cleveland on the 29th day of January, together with an explanatory letter, dated January 28, and a further explanatory letter dated January 29, copies of which are hereto attached, marked Exhibits 3 and 4 respectively. Duplicates of Exhibits 1, 2 and 3 were mailed to Judge Gore and Judge Martin at their respective addresses.

[fol. 700] 11. This company's counsel have now received, signed by the three judges of the court, a letter, copy of which is hereto attached, marked Exhibit 5.

12. This company is advised and therefore alleges that while the decree as entered on January 25 ought not rightly to be considered as a decree against this company on the merits, but ought to have the effect only of dismissal from the case without prejudice, yet the decree is open to misconstruction in that respect and there is danger that it might be held to be a final decree against this company, although in a case in which it had not been allowed to appear or participate.

13. Such a result would be so far a miscarriage of justice that the decree ought not be allowed to stand in such form as to give possible support to such construction, and therefore the decree should be so modified as expressly to recite either that this company had been dismissed from the case without prejudice to its rights, or that this company is thereby dismissed out of the case without prejudice to its rights.

Your petitioner therefore prays that the decree of January 25, in so far as it may purport to dismiss the Bill of this company on the merits, may be set aside; that this cause in that particular and to that extent be reheard; and that the decree of January 25 be modified and reentered in corrected form so that it may expressly dismiss this company as a party out of the case or so that the dismissal of the Bill as to this company may be without prejudice to its rights in the premises.

And your petitioner will ever pray.

Georgia Power Company, by Baker, Hostetler, Sidlo & Patterson, Arthur C. Denison, of Counsel.

[fol. 701] *Duly sworn to by Wm. H. Bemis. Jurat omitted in printing.*

I, the undersigned, being of counsel for the above-named petitioner, the Georgia Power Company, certify that the foregoing petition is not filed for delay but only in order that justice may be done.

Arthur C. Denison.

[fol. 702] To James Lawrence Fly, Counsel for Defendants:

Please take notice that the foregoing is a copy of the petition for rehearing this day filed by the Georgia Power Company and that the same will be brought on for hearing, not before the court in session in the ordinary way but, in accordance with the previous directions of the three judge court, will be presented by sending full copies thereof to each of the three judges at their respective addresses and that such copies are being this day sent accordingly.

If you desire to be heard in opposition to such petition, you are requested to present such opposition in the same way forthwith and not later than two days after receiving this notice. Lacking such opposition or any extension of time therefor, we suppose the court will be justified in thereupon acting upon the petition.

Dated, Knoxville, Tennessee, February 7th, 1938.

Copy of the foregoing petition for rehearing and above notice has this day been delivered to counsel for defendants.

Charles D. Snapp.

[fol. 703] EXHIBIT 1 TO PETITION FOR REHEARING

(Caption omitted)

ORDER

It having appeared to the Court upon the trial of this cause that the Georgia Power Company, one of the original complainants, had been enjoined by the United States District Court for the Northern District of Georgia from further participation in this cause seeking the relief sought in the bill of complaint herein, and the Georgia Power Company having not participated in the trial nor offered any evidence herein, and it having been the theory of the trial that in practical effect the Georgia Power Company had ceased

to be a party complainant and that because the Georgia Power Company could not be heard in this cause and no decree could be rendered herein in its favor, that therefore the bill as to the Georgia Power Company should be dismissed without prejudice, but the entry of an order to that effect having been at that time inadvertently omitted,

It is this day ordered, as of the 22nd day of January, 1938, now for then, that the Georgia Power Company be dismissed as a party complainant herein at its cost but without prejudice.

Dated January 29, 1938.

— —, United States Circuit Judge. — —,
— —, United States District Judges.

The defendants hereby consent to the making and entry of the foregoing order.

James Lawrence Fly, J. C. S., Solicitors for Defendants.

[fol. 704]

RECITAL AS TO EXHIBIT 2

Exhibit "2" is a copy of the motion to dismiss suit as against Georgia Power Company without prejudice and is here omitted to avoid duplication.

[fol. 705] EXHIBIT 3 TO PETITION FOR REHEARING

January 28, 1938.

Honorable Florence E. Allen, Cleveland, Ohio; Honorable John J. Gore, Cookeville, Tennessee; Honorable John D. Martin, Memphis, Tennessee:

In re The Tennessee Electric Power Company et al. v. Tennessee Valley Authority et al.

DEAR JUDGES:

We submit herewith a Motion and a form of proposed Order with reference to the Georgia Power Company. It will be recalled that the status of the Georgia Power Company was the subject of numerous references during the trial of

the above case. In particular, in excluding the testimony of the witness, Charles A. Collier, the Court stated, as appears at page 1643 of the Record:

"The ruling of the Court is that it will not receive the testimony of the witness, Charles A. Collier. The Georgia Power Company is not a party to this hearing and cannot pray for any relief here."

In this situation, there having been no formal Journal Entry dismissing the Georgia Power Company as a party complainant and this having escaped the attention of counsel prior to the entry of the Final Decree, we called Mr. Fitts yesterday and suggested that the oversight be corrected by a nunc pro tunc order to avoid the alternative of asking for a modification of the Decree, which might have the effect of extending the time for appeal. We were advised by Mr. Fitts that he concurred in the suggestion and that we were to feel at liberty to take the matter up with the members of the Court.

We are sending a copy of this letter to Mr. Fly, together [fol. 706] with the enclosures, and have already telephoned the form of the enclosures to Knoxville, so that the form of the proposed Order may be submitted to counsel for the Defendants for approval tomorrow morning. Assuming that counsel agree on the form of the Order, a copy of it with approving signatures will be mailed to each member of the Court tomorrow.

We are bringing the subject to the attention of the Court in this way, before there has been an agreement between counsel respecting the form of the Order, to minimize delay.

Very truly yours, Baker, Hostetler, Sidlo & Patterson,
Counsel for Complainants, by W. H. Bemis.

Copy to: James Lawrence Fly, Esq., Tennessee Valley Authority, Knoxville, Tennessee. Frantz, McConnell & Seymour, 700 Burwell Building, Knoxville, Tennessee. Trabue, Hume & Armistead, 7th Floor American Trust Bldg., Nashville, Tennessee.

[fol. 707] EXHIBIT 4 TO PETITION FOR REHEARING

January 29, 1938.

Honorable Florence E. Allen, 3290 Grenway Road, Shaker Heights, Ohio.

In re The Tennessee Electric Power Company et al., v. Tennessee Valley Authority et al.

DEAR JUDGE ALLEN:

I have just been advised by Mr. Snapp that counsel for the Defendants have approved the form of the proposed Order which is enclosed with the change shown by interlineation therein, and that a copy of the Order so changed, with approving acknowledgment by Defendants' counsel, is being mailed today to each member of the Court.

Very truly yours, W. H. Bemis.

S-2G.

Encs.

[fol. 708] EXHIBIT 5 TO PETITION FOR REHEARING

United States Circuit Court of Appeals for the Sixth Circuit, Michigan-Ohio-Kentucky-Tennessee

Chambers of Judge Allen, Cleveland, Ohio

January 31, 1938.

Baker, Hostetler, Sidlo & Patterson, Cleveland, Ohio. Tra-
bue, Hume & Armistead, Nashville, Tennessee. Frantz,
McConnell & Seymour, Knoxville, Tennessee. James
Lawrence Fly, Esq., Knoxville, Tennessee.

In re Tennessee Electric Power Company vs. T. V. A.
Equity, No. 228

DEAR SIRs:

The Court has considered the motion and order submitted in the above cause by the Georgia Power Company on January 29, 1938, asking that the Georgia Power Company be dismissed without prejudice as a party complainant by order entered nunc pro tunc. The decree was filed on January 25, 1938. We note that Mr. Fly has agreed to the entry of the order requested.

The motion is in unusual form. It does not specifically state its object except by reference to the order submitted therewith, and the Court therefore has considered the motion and order together.

A nunc pro tunc entry is an entry made now, of something which was actually previously done, to have effect as of the former date. Its office is not to supply omitted action by the Court, but to supply an omission in the record of action really had, but omitted through inadvertence or mistake. In this case no motion such as the motion now considered was [fol. 709] made prior to the entry of the decree; and the court at no time dismissed the Georgia Power Company as party complainant.

Also, a nunc pro tunc order will not be entered even in an otherwise proper case if the delay in entering it was due to some fault or omission by the party entitled to enter the order. Here, the moving party has caused the delay from which it seeks relief by nunc pro tunc order. The Georgia Power Company at any time before entry of final decree could have moved for dismissal without prejudice, but took no such action.

Counsel are advised that this motion if filed, or a similar motion, if filed in other form, seeking a nunc pro tunc order of dismissal without prejudice on behalf of the Georgia Power Company, will be overruled, upon the following grounds:

(1) that the proposed motion and order are fatally defective because they seek the entry nunc pro tunc of an order never made by the Court; and,

(2) that laches is shown upon the part of the Georgia Power Company, the moving party.

Florence E. Allen, U. S. Circuit Judge. John J. Gore,
U. S. District Judge. John D. Martin, U. S. District Judge.

Copy has been delivered to defendants.

(S.) Charles D. Snepp.

[fol. 710] IN UNITED STATES DISTRICT COURT

(Caption omitted)

DEFENDANTS' MOTION FOR FINDINGS OF FACT AND CONCLUSIONS OF LAW—Filed February 8, 1938

Now come the defendants and move the Court to adopt, sign, and enter the attached findings of fact and conclusions of law, and the defendants further move that the Court enter an order directing the Clerk of this Court to file and enter the attached findings of fact and conclusions of law under date of January 24, 1938, the date upon which this Court actually approved and adopted these findings and conclusions, as set out in the order of January 24, 1938, previously entered in this cause.

Respectfully submitted, (S.) James Lawrence Fly,
John Lord O'Brian, William C. Fitts, Jr., Solicitors for the Defendants.

I hereby certify that I have on this 8th day of February, 1938, delivered a copy of the above motion, together with the attached findings of fact and conclusions of law, to Messrs. Frantz, McConnell & Seymour, solicitors of record for the complainants.

(S.) William C. Fitts, Jr., Solicitor for the Defendants.

(The draft of findings of fact and conclusions of law attached to the motion is the same as the findings of fact and conclusions of law filed by the Court on February 23, 1938, and for brevity is here omitted.)

[fol. 711] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER DISMISSING GEORGIA POWER COMPANY WITHOUT PREJUDICE—Filed February 22, 1938

This cause came on to be heard upon the motion to dismiss complainant the Georgia Power Company from the case without prejudice by nunc pro tunc order of some date prior to the entry of the decree herein.

And it appearing that counsel for defendants consent to the entry of an order dismissing the Georgia Power Company as party complainant in this action without prejudice by nunc pro tunc order;

And it further appearing that said motion and order were on February 7, 1938, filed with the clerk of this court;

The court finds that the omission to mention the Georgia Power Company in the decree and to dismiss it from the case without prejudice was not an inadvertence of the court since at no time during or subsequent to the trial and prior to the decree was any motion filed with the court praying for such dismissal nor was any suggestion made by counsel at any time prior to the decree that the Georgia Power Company be so dismissed;

And the court finds that the inadvertence and laches in this matter are the inadvertence and laches solely of counsel.

And the court being of opinion that the decree should dispose of this question, as well as of all other questions in the case, in accordance with the facts shown by the record and for the purpose of expediting the preparation of the record, sustains such motion.

It is this day ordered as of the twenty-second day of January, 1938, now for then, that the Georgia Power Company be dismissed as a party complainant herein at its costs but without prejudice.

Florence E. Allen, United States Circuit Judge. John J. Gore, John D. Martin, United States District Judges.

[fol. 712] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER ON FINDINGS OF FACT AND CONCLUSIONS OF LAW—
Filed February 23, 1938

The Court having previously on, to wit, January 24, 1938, adopted and entered an order by which the Court adopted as the findings of fact and conclusions of law in this cause certain findings and conclusions which had been proposed by the respective parties by setting out in said order by reference to the numbers appearing in the respective drafts of proposed findings of fact and conclusions of law filed by the respective parties the findings and con-

clusions actually adopted by the Court, and the Court having heretofore suggested to counsel that a complete draft of the findings of fact and conclusions of law actually adopted by the Court should be prepared and filed in this cause as the findings of fact and conclusions of law of the Court, and counsel for the defendants having prepared such a complete draft incorporating therein and setting out in full all of the findings of fact and conclusions of law adopted by the Court in said order of January 24, 1938, together with the separate views of Judge Gore with respect to said findings and conclusions, and the defendants having moved that these findings of fact and conclusions of law be adopted, signed, and entered as the findings of fact and conclusions of law of the Court in this cause, and the Court having considered the same and being of the opinion that the findings of fact and conclusions of law so submitted by the defendants accurately set forth the findings and conclusions adopted by the Court in said order of January 24, 1938, and the Court having heretofore adopted, signed, and entered said findings of fact and conclusions of law as the final findings of fact and conclusions of law of the Court in this cause, it is hereby

Ordered, Adjudged and Decreed that the clerk of this Court be and he is hereby instructed to file and enter these findings of fact and conclusions of law now for then under date of January 24, 1938, the date upon which said findings of fact and conclusions of law were actually adopted by the Court.

(S.) Florence E. Allen, United States Circuit Judge.

(S.) John D. Martin, United States District Judge.

— — —, United States District Judge.

[fol. 713] IN UNITED STATES DISTRICT COURT

(Caption omitted)

FINDINGS OF FACT AND CONCLUSIONS OF LAW—Filed February
23, 1938

In accordance with Equity Rule 70½ the Court in deciding the above suit in equity makes findings of fact and conclusions of law respectively as follows:

Findings of Fact

Status of the Parties

1. Complainants are eighteen privately owned public utility corporations duly qualified to engage as public utilities in the States of Tennessee, Georgia, Mississippi, Alabama, Kentucky, North Carolina, South Carolina, Virginia, and West Virginia, and are engaged principally in the business [fol. 714] of generating, transmitting and distributing and selling electricity, or distributing and selling electricity, or transmitting and selling electricity as public utilities in said States.

2. The defendant Tennessee Valley Authority is a body corporate created by an act of Congress approved May 18, 1933, and has an office in Knoxville, Knox County, Tennessee.

3. The defendants Arthur E. Morgan, Harcourt A. Morgan, and David E. Lilienthal are, severally, residents of Knox County, Tennessee, and are the three chief executive officers and constitute the Board of Directors of the Tennessee Valley Authority.

4. This is an action of a civil nature, in equity, originally filed in the Chancery Court of Knox County, Tennessee, and thereafter duly removed by the defendants to this Court.

5. This is a suit in equity and involves questions arising under the Constitution and laws of the United States, and the amount in controversy exceeds, exclusive of interest and costs, the sum or value of \$3,000.

6. The Tennessee Electric Power Company is a public utility corporation organized under the laws of the State of Maryland, is duly qualified to carry on its business as a public utility in the States of Tennessee and Georgia, and has its principal place of business in the city of Chattanooga, Tennessee. For more than twenty years said company and its predecessors have been engaged in the electric-power business, and today it is distributing electricity in 66 counties in Tennessee, 4 counties in Georgia, and 455 communities in Tennessee and Georgia, including the cities of Chattanooga and Nashville, Tennessee. All of the operating territory of the company, with the exception of

a small area north of Nashville, Tennessee, is located within a 100-mile radius of one or more TVA generating plants constructed, under construction, or authorized to be constructed. Said company owns and operates 1,559 miles of transmission lines and 5,226 miles of distribution lines, of which 2,677 are classified as rural distribution lines, in said States of Tennessee and Georgia. It owns generating facilities with a total installed capacity of 244,009 kilowatts and leases generating facilities with a total installed capacity of 6,500 kw. In addition to these facilities the company is preparing to begin construction of a steam generating plant at Bordeaux, Tennessee, with an initial installed capacity of 25,000 kw. and provision for future increase to 150,000 kw. The company's steam plant at Hale's Bar was constructed to provide for expansion of its present capacity of 40,000 kw. to an ultimate capacity of 100,000 kw. Said company also owns hydro sites capable of producing, when developed, 76,000 kw. and has interconnections with other utilities, the total capacity of the interconnections being 160,000 kva. Said company also owns and operates transportation systems in the cities of Chattanooga and Nashville, Tennessee, water systems in 11 municipalities, ice plants in 7 municipalities, and a telephone system in one municipality. For a period of years these businesses have been operated under the same management with the electric operations and as one business, and the severance of one from the other would have an adverse effect upon the company.

[fol. 716] In the year ending September 30, 1937, the company served 136,470 customers, of which 38,399 were classified as rural customers, and, exclusive of sales to other utilities, sold 767,646,665 kilowatt hours, of which 496,923,761 kwh., or 64.7% represented sales to industrial customers. The company has issued an outstanding \$49,313,300 in bonds, 241,296 shares of \$100 par value preferred stock, and 425,000 shares of no par common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee; and it has 3,500 employees.

7. Franklin Power & Light Company is a public utility corporation organized under the laws of the State of Tennessee, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the city of Franklin, Tennessee. Ever since the organization of the

company in 1929 it has been engaged in the electric-power business, distributing electricity in and around the city of Franklin, Tennessee. Its operating territory lies approximately 80 miles from Wilson Dam. The company owns and operates a distribution system consisting of 15 miles of line. It also owns a steam generating plant with an installed capacity of 1,800 kw., which is maintained as a standby plant for The Tennessee Electric Power Company, from which company the Franklin Power & Light Company purchases its power requirements. In the year 1936 the company served 901 customers and sold a total of 3,219,758 kwh. Said company has issued and outstanding \$100,000 in bonds and 1,900 shares of \$100 par value stock, all of which were issued with the approval of the Railroad & Public Utilities Commission of Tennessee.

[fol. 717] 8. Memphis Power & Light Company is a public utility corporation organized under the laws of the State of New Jersey, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the city of Memphis, Tennessee. For more than 20 years said company and its predecessors have been engaged in the electric-power business, and it is now distributing electricity in Shelby County, Tennessee, and in 37 towns and communities therein, including the city of Memphis. The operating territory of the company is from 74 to 105 miles from Pickwick Dam. Said company owns and operates 319 miles of transmission lines and 905 miles of distribution lines. It owns a steam generating plant with an installed capacity of 54,000 kw., has interchange facilities with Arkansas Power & Light Company and Mississippi Power & Light Company, and owns a site for the erection of additional generating facilities with an installed capacity of from 20,000 to 30,000 kw. It owns and operates a natural-gas distribution system throughout its territory, from which approximately 37% of the total gross revenues of the company are derived. The gas and electric properties are jointly operated under the same management, and a loss of all or a substantial part of its electric business would increase the cost of operating the gas department. In the year ending July 30, 1937, the company served 56,952 customers and, exclusive of sales to other utilities, sold 191,888,000 kwh., of which 61,841,000 kwh., or 32.23%, represented sales to industrial customers. The company has issued and out-

standing \$22,275,000 in bonds, 30,000 shares of no par value [fol. 718] \$7 preferred stock, 32,000 shares of no par value \$6 preferred stock and 7,200 shares of no par common stock, all of which were issued with the approval of the Railroad & Public Utilities Commission of Tennessee.

9. Southern Tennessee Power Company is a public utility corporation organized under the laws of the State of Delaware, is duly qualified to carry on its business as a public utility in the States of Alabama and Tennessee, and has its principal place of business in the city of Chattanooga, Tennessee. The company owns and operates a high-tension transmission line from Wilson Dam, Alabama, to Iron City, Tennessee, a distance of approximately 15 miles, and is engaged in the business of transmitting electric energy over said transmission line, which constitutes a connection between the Alabama Power Company and the Tennessee Electric Power Company. The company has outstanding a note amounting to \$380,000 and 10 shares of no par stock.

10. Birmingham Electric Company is a public utility corporation organized as such under the laws of the State of Alabama and has its principal place of business in the city of Birmingham, Alabama. For many years said company and its predecessors have been engaged in the electric-power business, and it is now distributing electricity in the city of Birmingham, Alabama, and the metropolitan district thereof, including the towns of Bessemer, Jonesboro, Brighton, Lipscomb, Fairfield, Irondale, Homewood and Tarrant City, as well as in Jefferson County, Alabama, all which territory was set aside to it by order of the Alabama Public Service [fol. 719] Commission. The company's operating territory is located approximately 66 miles from Guntersville Dam. Said company owns and operates 1,057.52 miles of distribution pole lines. It purchases at wholesale from the Alabama Power Company the electricity which it distributes and owns a steam generating plant with an installed capacity of 11,300 kw., which is used as a standby station. It also owns and operates a transportation system throughout its territory, which contributes about 33% of the total gross revenues of the company, and a steam heating system serving a substantial portion of the business district of the city of Birmingham, which contributes approximately 1% of the company's total gross revenues. These several businesses have for a period of years been jointly operated. The com-

pany served 68,110 customers, and in 1936, exclusive of inter-departmental sales, sold 208,113,400 kwh., of which 116,429,366 kwh., or approximately 56% of its total sales, represented sales to industrial customers.

11. Mississippi Power Company is a public utility corporation organized under the laws of the State of Maine, is duly qualified to carry on its business as a public utility in the State of Mississippi, and has its principal place of business in the City of Gulfport, Mississippi. For more than 12 years said company and its predecessors have been engaged in the electric-power business, and today it is distributing electricity in 34 counties and in 147 towns and communities in the State of Mississippi. Most of the operating territory of the company is located within 250 miles from Pickwick and Gunter'sville Dams, and much of the operating territory lies within 100 and 150 miles from said [fol. 720] TVA generating plants. Said company owns and operates 857.41 pole miles of transmission lines and 1,080.5 pole miles of distribution lines. It owns generating facilities with a total installed capacity of 18,702 kw., and it has, subject to lease or contract, generating facilities with an installed capacity of 6,450 kw. The company, however, purchases substantially all its power requirements from the Alabama Power Company at 4 interchange points having a combined capacity of 66,300 kw. As a part of its business the company owns and operates a transportation system in the city of Hattiesburg, Mississippi, the total gross revenues from which in the year 1936 were less than 1% of the total revenues received by the company from all sources. In 1936 the company, within a 100-mile radius of Pickwick Dam, served 1,247 customers, sold 2,102,086 kwh., and derived a revenue therefrom of \$88,254.39; within a 150-mile radius of said dam it served 6,068 customers, sold 14,816,009 kwh., and derived a revenue therefrom of \$484,839.85; within a 250-mile radius of said dam it served 20,772 customers, sold 87,936,552 kwh., and derived a revenue therefrom of \$1,768,553.86. The total kwh. sales to regular customers in that year amounted to 121,160,760 kwh., of which 64,216,059 kwh., or 53%, represented sales to industrial customers. The company has issued and outstanding \$10,690,500 in first mortgage bonds, 39,092 shares of preferred stock, and 450,000 shares of common stock; and it has 512 employees.

12. Appalachian Electric Power Company is a public utility corporation organized under the laws of the state [fol. 721] of Virginia, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee, and West Virginia, and has its principal place of business in the city of Roanoke, Virginia. Said company is engaged in the electric-power business and distributes electricity in 29 counties in Virginia, 20 counties in West Virginia, and 522 towns and communities in Virginia and West Virginia. Most of the operating territory of the company is located within 250 miles of Norris Dam; much of its territory is located within 150 miles of said dam, and some of its territory is located within 100 miles of said dam. Said company owns and operates 1,767.88 pole miles of transmission lines, 4,663.79 pole miles of distribution lines, of which 2,527 miles are classified as rural lines, and in addition, on August 31, 1937, had 452 miles of rural lines under construction. The company owns generating facilities with a total installed capacity of 381,390 kw. and has a purchased capacity of 43,500 kw. In 1936 within a 100-mile radius of Norris Dam the company served 439 customers, sold 337,500 kwh., and derived a revenue therefrom of \$16,236; within a 150-mile radius of said dam it served 8,171 customers, sold 69,263,102 kwh., and derived a revenue therefrom of \$1,312,443; within a 250-mile radius of said dam it served 126,700 customers, sold 1,283,307,996 kwh., and derived a revenue therefrom of \$17,690,540. The total kwh. sales to regular customers in that year amounted to 1,351,653,286 kwh., of which 1,153,567,845 kwh., or 85.34%, represented sales to industrial customers. The company has issued and outstanding \$80,774,000 in bonds, and preferred and common stock aggregating \$53,500,167.27, and has 3,366 employees.

[fol. 722] 13. Carolina Power Co. & Light Company is a public utility corporation organized under the laws of the State of North Carolina, is duly qualified to carry on its business as a public utility in said State and in the State of South Carolina, and has its principal place of business in the city of Raleigh, North Carolina. For more than 20 years said company and its predecessors have been engaged in the electric-power business. It is now distributing electricity in the States of North and South Carolina and 272 incorporated towns and communities therein. A portion of the company's operating territory is located within a

radius of 100 miles of Norris and Fowler Bend Dams and Fontana Dam site, a part of its territory is located within a radius of 150 miles of Fowler Bend Dam and Fontana Dam site, and a part of it is located within a radius of 250 miles of Fowler Bend Dam and Fontana Dam site. Said company owns and operates 1,256 pole miles of transmission lines and 5,921 pole miles of distribution lines. It owns generating facilities with a total installed capacity of 249,050 kw., which are capable of being enlarged so as to produce an additional 80,000 kw. It owns a hydro site capable of producing, when developed, 40,000 kw. and has interconnections with other utilities, the total capacity of such interconnections being 384,000 kw. As a part of its business the company owns and operates transportation systems in Raleigh and Asheville, the gross revenues from which are less than 4% of the total gross revenues of the company. In 1936 the company served 83,836 customers and, exclusive of sales to other utilities, sold 536,521,801 kwh. In said year the company, within a radius of 100 miles from Norris [fol. 723] and Fowler Bend Dams and Fontana Dam site, sold, exclusive of sales to other utilities, 115,802,557 kwh., of which 83,553,403, or approximately 61%, represented sales to industrial customers; within a 150-mile radius of Fowler Bend Dam and Fontana Dam site it sold, exclusive of sales to other utilities, 118,167,621 kwh., of which 85,530,602 kwh., or approximately 72%, represented sales to industrial customers; and within a 250 mile radius of Fontana Dam site it sold, exclusive of sales to other utilities, 309,197,905 kwh. The company has issued and outstanding \$46,000,000 in bonds, 165,162 shares of no par value preferred stock entitled to \$6 and \$7 annual dividends, and 2,500,000 shares of no par common stock, and had as of August 1937, 1,434 regular employees and 57 temporary employees.

14. Tennessee Public Service Company is a public utility corporation organized under the laws of the State of Maine, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the city of Knoxville, Tennessee. For many years said company and its predecessors have been engaged in the electric-power business, and it is now distributing electricity in Knox, Jefferson, Cocke, Sevier, Union, and Grainger Counties, Tennessee, and 37 towns and communities therein, including the city of Knoxville. The entire operating territory of the company is located within a

distance of from 25 to 75 miles of Norris Dam. Said company owns and operates 180.58 miles of transmission lines and 1,063.77 miles of distribution lines. It purchases practically all of its power requirements from the complainant [fol. 724] Carolina Power & Light Company and also owns generating facilities with an installed capacity of 3,150 kw. Said company also owns and operates a transportation system in the city of Knoxville, Tennessee, which contributes approximately 21½% of the company's total gross revenues. Both the transportation and electric properties are operated under the same management and as one business. In the year ending September 30, 1937, the company served 30,074 electric customers and, exclusive of interdepartmental sales and sales to other utilities, sold 131,404,000 kwh., of which 73,269,000 kwh., or 55.76%, represented sales to industrial customers. The company has issued and outstanding \$7,780,000 in bonds, 50,000 shares of no par preferred stock entitled to a \$6 annual cumulative dividend per share, and 1,000,000 shares of common stock, all of which were issued with the approval of the Railroad and Public Utilities Commission of Tennessee.

15. Holston River Electric Company is a public utility corporation organized as such under the laws of the State of Tennessee with its principal place of business in the city of Knoxville, Tennessee. Said company is distributing electricity in the incorporated town of Rogersville, Tennessee, and 8 communities in Hawkins and Hamblen Counties, Tennessee, and to rural customers in said counties. The entire operating territory of the company is located within 75 miles of Norris Dam. Said company owns and operates 98.54 miles of distribution lines and purchases at wholesale, power, which it distributes, from the complainant Tennessee Public Service Company. For the year ending September 30, 1937, the company sold 1,560,000 kwh.

[fol. 725] 16. Alabama Power Company is a public utility corporation organized under the laws of the State of Alabama, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the city of Attalla, Alabama. The company is engaged in the electric-power business and distributes electricity in 65 of the 67 counties of the State of Alabama and in 594 communities in the same State. Practically all of the operating territory of the company is located within 250 miles of

Guntersville and Wilson Dams; most of the operating territory is located within 150 miles of said dams, and much of the territory is located within 100 miles of said dams. Said company owns and operates 3,435 circuit miles of transmission lines, 2,810 miles of distribution lines within incorporated municipalities, and 4,519 miles of line classified as rural. It owns generating facilities with a total installed capacity of 571,744 kw. and has made provision for the expansion of its existing plants such that their capacities may be increased by 321,500 kw.

In 1936, exclusive of sales to the Birmingham Electric Company, the company sold within a 100-mile radius of TVA dams constructed or under construction 711,835,625 kwh. and derived a revenue therefrom of \$7,384,969.48; within a 150-mile radius of said dams it sold 961,720,184 kwh. and derived a revenue therefrom of \$11,147,768.38; and within a 250-mile radius of said dams it sold 1,018,109,064 kwh. and derived a revenue therefrom of \$12,346,658.72. In that year the total kwh. sales, exclusive of sales to utilities, amounted to 1,145,267,755 kwh., of which 948,565,825, or 82.8%, represented sales to industrial customers. [fol. 726] The total number of customers served in that year was 123,739. The company has issued and outstanding \$96,771,600 in bonds, 367,178 shares of \$5, \$6 and \$7 preferred stock at a stated value of \$35,751,258, and 3,775,000 shares of common stock at a stated value of \$48,961,300, all of which securities issued subsequent to the creation of the Alabama Public Service Commission were issued with its approval; and it has 2,850 employees.

17. Kentucky and West Virginia Power Company, Inc., is a public utility corporation organized under the laws of the State of Kentucky, is duly authorized to carry on its business as a public utility therein, and has its principal place of business in the city of Ashland, Kentucky. Said company is engaged in the electric-power business and distributes electricity in 14 counties and in 100 towns and communities in the State of Kentucky. All of the operating territory of the company is located within 250 miles of Norris Dam; most of its territory is located within 150 miles of said dam, and some of its territory is located within 100 miles of said dam. Said company owns and operates 435.53 pole miles of transmission lines, 553.01 pole miles of

distribution lines, of which 131 miles are classified as rural distribution lines, and in addition, on August 31, 1937, had 31 miles of rural distribution lines under construction. The company owns generating facilities with a total installed capacity of 19,500 kw. In 1936 within a 100-mile radius of Norris Dam the company served 3,713 customers, sold 30,078,589 kwh., and derived a revenue therefrom of \$685,969; within a 150-mile radius of said dam it served 9,919 [fol. 727] customers, sold 87,946,055 kwh., and derived a revenue therefrom of \$1,700,159; within a 250-mile radius of said dam it served 21,170 customers, sold 254,600,861 kwh., and derived a revenue therefrom of \$3,314,345. The total kwh. sales to regular customers in that year amounted to 254,600,861, of which 232,243,229 kwh., or 91.32%, represented sales to industrial customers. The company has issued and outstanding \$8,499,000 in bonds, and preferred and common stock aggregating \$4,147,525, and has 435 employees.

18. Kingsport Utilities, Inc., is a public utility corporation organized under the laws of the State of Virginia, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the city of Kingsport, Tennessee. The company is engaged in the electric-power business and is distributing electricity in the counties of Sullivan and Hawkins in the State of Tennessee. All of the operating territory of the company is located within a 100-mile radius of Norris Dam. Said company owns and operates 5.75 pole miles of transmission line, 133.53 pole miles of distribution lines, of which 49 miles are classified as rural distribution lines, and in addition, on August 31, 1937, had 6 miles of rural distribution lines under construction. It also owns generating facilities with a total installed capacity of 11,400 kw. In the year 1936 the company served 4,358 regular customers and sold 37,468,385 kwh., of which 30,356,870 kwh., or 81%, represented sales to industrial customers. The company has issued and outstanding \$1,044,000 in bonds and \$1,000,000 of preferred and common stocks and has 98 employees.

[fol. 728] 19. Kentucky-Tennessee Light & Power Company is a public utility corporation organized under the laws of the State of Kentucky, is duly qualified to carry on its business as a public utility in said State and in the State of Tennessee, and has its principal place of business in the

city of Bowling Green, Kentucky. The company is engaged in the electric-power business and distributes electricity in many counties in Tennessee and Kentucky. All of the operating territory of the company is within a 250-mile radius, and most of the operating territory is within a 100-mile radius, of one or more TVA generating plants constructed, under construction, or authorized to be constructed. Said company owns and operates many miles of transmission and distribution lines in the States of Tennessee and Kentucky.

20. West Tennessee Power & Light Company is a public utility corporation organized under the laws of the State of Florida, is duly qualified to carry on its business as a public utility in the State of Tennessee, and has its principal place of business in the city of Jackson, Tennessee. For more than 30 years said company and its predecessors have been engaged in the electric-power business, and it is now distributing electricity in 9 counties in west Tennessee and 24 incorporated towns and communities, including the city of Jackson, Tennessee. All of the operating territory of the company is from 40 to 75 miles of Pickwick Dam. Said company owns and operates 90.6 miles of transmission lines and 193.6 miles of lines classified as rural. It owns generating facilities with a total installed capacity of 5,228 kw. and also has interconnections with Memphis Power & [fol. 729] Light Company, from whom it purchases power at wholesale. It owns and operates natural-gas distribution systems in 6 municipalities, ice plants in 2 municipalities, waterworks systems in 3 municipalities, and a transportation system in the city of Jackson, Tennessee. For a period of years these businesses have been operated under the same management with the electric operations and as one business and are closely intermingled. For the year ending July 31, 1937, the company served 10,050 customers and, exclusive of interdepartmental sales, sold 19,322,248 kwh., of which 8,080,659 kwh., or 38.74%, represented sales to industrial customers.

21. Mississippi Power & Light Company is a public utility corporation organized under the laws of the State of Florida, is duly qualified to carry on its business as a public utility in the State of Mississippi, and has its principal place of business in the city of Jackson, Mississippi. For many years said company has been engaged in the electric-

power business and at present is distributing electricity in 40 counties in Mississippi and 312 incorporated towns and communities therein, including the cities of Vicksburg, Natchez, Jackson, and Greenville. Most of the operating territory of the company is located within 250 miles from Pickwick Dam, and a substantial portion of its operating territory is within 150 miles of Wheeler and Gunter'sville Dams. Said company owns and operates 456.8 miles of transmission lines and 2,628.2 miles of distribution lines. The company purchases substantially all of its power requirements from the Louisiana Power & Light Company, [fol. 730] and also owns generating facilities with an installed capacity of 19,146 kw. As a part of its business the company owns and operates transportation systems in the cities of Jackson, Greenville, and Vicksburg; natural-gas distribution systems in 24 municipalities; ice manufacturing systems in 5 municipalities; water systems in 6 municipalities; and leases and operates water systems in 4 municipalities. The total gross revenues from such operations in 1936 were 29% of the total gross revenues received by the company from all sources. All properties of the company are operated together as a unit, and the destruction of the whole or a substantial part of its electric business would seriously hamper the company's ability to efficiently operate its other properties. In 1936 the company, within a 150-mile radius of Pickwick Dam, served 7,779 customers, sold 18,734,247 kwh., and derived revenue therefrom of \$743,744.92; within a 250-mile radius of said dam it served 29,454 customers, sold 117,792,338 kwh., and derived revenue therefrom of \$3,063,194.36. The total kwh. sales to regular customers in that year amounted to 157,608,000 kwh., of which 87,673,000 kwh., or 55.6%, represented sales to industrial customers. The company has issued and outstanding \$16,000,000 in bonds, 69,000 shares of no par value first preferred stock entitled to a \$6 annual cumulative dividend, 35,000 shares of no par value second preferred stock entitled to a \$6 annual cumulative dividend, and 1,000,000 shares of no par common stock.

22. East Tennessee Light & Power Company is a public utility corporation organized under the laws of the State [fol. 731] of Virginia, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee, and North Carolina, and has its principal place of business

in the city of Bristol, Tennessee-Virginia. For many years said company and its predecessors have been engaged in the electric-power business, and today it is distributing electricity in Carter, Johnson, Sullivan, Unicoi and Washington Counties, Tennessee; in Scott and Washington Counties, Virginia; in Avery County, North Carolina; and in 32 incorporated towns and communities, including the city of Bristol, Tennessee-Virginia. All of the operating territory of the company is within a radius of 135 miles of Norris Dam, the larger part of it being within a radius of 100 to 115 miles of said dam. Said company owns and operates 66.5 miles of transmission lines and 354.4 miles of distribution lines in said States of Tennessee, Virginia, and North Carolina. It owns generating facilities with a total installed capacity of 3,828 kw. Said company also owns a hydro site near Elizabethton, Tennessee, and has interconnections with Appalachian Electric Power Company and Edmondson Electric Company. The company also owns and operates a gas distribution system in the city of Bristol, Tennessee-Virginia, from which operation approximately 10% of the total gross revenue of the company is derived. In the year ending July 31, 1937, the company served 10,312 customers, of which 1,572 were classified as rural customers, and in 1936, sold 22,904,648 kwh., of which 9,243,729 kwh., or 40.4%, represented sales to industrial customers. The company has issued and outstanding \$2,731,000 in bonds, 2,635 shares of no par preferred stock [fol. 732] entitled to a \$6 annual cumulative dividend, and 35,000 shares of no par common stock, all of which were issued with the approval of the Railroad & Public Utilities Commission of Tennessee; and it has 204 employees.

23. Tennessee Eastern Electric Company is a public utility corporation organized under the laws of the State of Massachusetts, is duly qualified to carry on its business as a public utility in the States of Virginia, Tennessee, and North Carolina, and has its principal place of business in the city of Bristol, Tennessee-Virginia. For many years said company and its predecessors have been engaged in the electric-power business, and at present it is distributing electricity in Carter, Greene, Johnson, Unicoi, and Washington Counties, Tennessee, and in 57 towns and communities therein, including the cities of Johnson City and Greenville, Tennessee. The operating territory of the company

is located within a radius of from 50 to 100 miles of Norris Dam. Said company owns and operates 65.7 miles of transmission lines and 442.7 miles of distribution lines. It owns generating facilities with a total installed capacity of 19,060 kw. and has done preliminary work at hydro sites which it owns capable of producing, when developed, in excess of 51,000 kw.; and the capacity of its Watauga steam plant is capable of being enlarged. In the year ending July 31, 1937, the company served 8,642 customers, of which 2,304 were classified as rural customers, and in 1936, exclusive of sales to other utilities, sold 24,548,569 kwh., of which 11,049,650 kwh., or 45%, represented sales to industrial customers. The company has issued and outstanding \$2,669,500 in bonds, 6,000 shares of \$100 par value preferred [fol. 733] stock entitled to an annual \$6 cumulative dividend, 5,105 shares of no par value preferred stock entitled to a \$7 annual cumulative dividend, and 15,000 shares of no par common stock, all of which were issued with the approval of the Railroad & Public Utilities Commission of Tennessee; and it has 125 employees.

24. Installed capacity is not a measure of the dependable capacity available for electric service. In the case of hydro-electric plants the limiting factor is the water available and not the amount of machinery installed. Of the dependable steam and hydro capacity in a low-water year a reserve is required to take care of various contingencies.

25. Complainants, and each of them, are subject to a special tax to which taxpayers generally are not subject, the tax being upon electrical energy sold for domestic and commercial consumption, in an amount equal to 3% of the price for which complainants sell the same, which is imposed by section 616 of the Federal Revenue Act of 1932, as amended. Complainants also severally pay large sums of money in the form of general taxes to the Federal Government, including Social Security taxes and taxes for unemployment relief imposed by sections 211 to 219 inclusive of the National Industrial Recovery Act. Complainants severally are subject to and pay special and general taxes levied upon privately owned utilities by the several States and their political subdivisions in which complainants severally carry on business or own property.

[fol. 734] Following is a table of the taxes paid by each of the complainant companies, with the exception of Kentucky.

Tennessee Light & Power Company, for the year 1936, with an estimate of the taxes to be paid by each company for the year 1937. The taxes paid by complainants for the year 1936, exclusive of Kentucky-Tennessee Light & Power Company, averaged in excess of 12.7% of complainants' gross revenue, and for the year 1937, exclusive of Kentucky-Tennessee Light & Power Company, it is estimated that such taxes will be in excess of 14.4% of the total gross revenues of the companies.

Name of Company	1936	1937 (Est.)
The Tennessee Electric Power Company...	\$2,278,880.60	\$2,613,895.00
Franklin Power & Light Company.....	5,681.77
Memphis Power & Light Company.....	1,071,794.82	1,321,527.00
Southern Tennessee Power Company.....	5,896.77	5,953.00
Birmingham Electric Company.....	828,953.47	1,009,329.00
Mississippi Power Company.....	396,286.26	437,891.00
Appalachian Electric Power Company....	2,817,013.07	3,069,047.97
Carolina Power & Light Company.....	1,607,877.58	2,035,440.00
Tennessee Public Service Company.....	471,335.33	590,733.00
Holston River Electric Company.....	5,414.47	5,611.00
Alabama Power Company.....	2,380,556.45	3,126,400.50
Kentucky & West Virginia Power Company, Inc.....	344,104.06	350,919.03
Kingsport Utilities, Incorporated.....	59,697.46	85,437.89
West Tennessee Power & Light Company..	119,670.44	140,122.88
Mississippi Power & Light Company.....	738,463.61	918,832.00
East Tennessee Light & Power Company...	87,431.38	105,687.57
Tennessee Eastern Electric Company.....	130,419.90	190,390.40
	<hr/> \$13,349,477.44	<hr/> \$16,007,217.24

26. The rates and services of each of the complainant companies in the States of Alabama, Tennessee, Kentucky, Virginia, Georgia, West Virginia, North Carolina, and South Carolina are regulated by State commissions in the respective States. There is no State commission in Mississippi. The rates and services of the complainant companies in that State are regulated by municipalities within their corporate limits.

27. The rates charged by the several complainant companies in the States of Alabama, Tennessee, Georgia, Virginia, North Carolina, and South Carolina are uniform for the different classes of service throughout their respective operating territories. As between the complainant companies operating within a State there is no requirement of uniformity of rates.

28. The respective complainants have been issued franchises, licenses, or easements by most but not all of the municipalities and by most but not all of the counties in

which they respectively operate electric facilities. Said franchises, licenses, or easements vary in original term and in unexpired term from a few months to more than 50 years, and many are unlimited in term. Most of the said franchises, licenses, or easements purport to be nonexclusive. Most of said franchises, licenses, or easements grant rights not limited within the respective municipalities or counties, but some are limited to particular streets or highways or to portions of the respective counties or municipalities. Some of the franchises, licenses, or easements purport to grant the right to construct and occupy the streets and highways with electrical facilities; some of said franchises, licenses, or easements purport to grant, for the purpose of engaging in the business of selling and distributing electricity, the right to occupy the streets and highways; and [fol. 736] some of said franchises, licenses, or easements purport to grant the right to occupy the streets and highways with electrical facilities and to engage in the business of selling and distributing electricity within the respective municipalities and counties. The validity of one of the municipal franchises, licenses, or easements claimed by complainants is now being contested in a State court by the municipality concerned.

[fol. 737] Status of Projects of the Tennessee Valley Authority

29. On October 3, 1933, TVA began the construction of Norris Dam and power plant on the Clinch River, a tributary of the Tennessee River, located 79.8 miles above its mouth, and completed such construction in March 1936, at a total cost of \$36,310,370, and began generating power in July 1936. The dam is 265 feet high; 1,872 feet in length; has a normal reservoir area of 34,200 acres; a reservoir shore line of 705 miles; and has an installed generating capacity of 100,800 kw.

30. On November 30, 1933, TVA began construction of Wheeler Dam and power plant located 15.5 miles above Wilson Dam on the Tennessee River, and construction was completed in November 1936, at a total cost of \$35,317,964, exclusive of the cost of the lock built by the War Department, at a cost of \$1,939,693. Wheeler Dam began to generate power in November 1936. The Corps of Engineers in 1932 proposed to construct this dam with a lift of 15 feet as an integral part of the low-dam navigation plan. The

estimated cost of said dam in its ultimate stage will be \$42,817,964, exclusive of the lock built by the War Department. The dam is 72 feet in height; 6,335 feet in length; has a normal reservoir area of 64,300 acres; a reservoir shore line of 1,063 miles; has an initial installed generating capacity of 128,000 kw. and an ultimate generating capacity of 256,000 kw.

31. In March 1935 TVA began construction of the Pickwick Landing Dam and power plant located on the Tennessee River 52.7 miles below Wilson Dam and 100 miles east of Memphis, Tennessee, and the construction will be completed in June 1938, at an initial cost of \$33,199,497 and [fol. 738] estimated ultimate cost of \$42,431,497. The dam will be 110 feet in height; 7,715 feet in length; have a normal reservoir area of 41,600 acres; a reservoir shore line of 496 miles; an initial installed generating capacity of 72,000 kw. and an ultimate generating capacity of 216,000 kw.

32. On December 4, 1935, TVA began the construction of Guntersville Dam and power plant located on the Tennessee River above Wheeler Dam, near Guntersville, Alabama, and construction is estimated to be completed in December 1938, at an estimated initial cost of \$34,123,660 and an estimated ultimate cost of \$38,524,860. The dam will be 89 feet in height; 4,000 feet in length; have a normal reservoir area of 63,300 acres; a reservoir shore line of 660 miles, with an initial installed generating capacity of 50,000 kw. and an ultimate generating capacity of 100,000 kw.

33. On January 13, 1936, TVA began construction of Chickamauga Dam and power plant on the Tennessee River about 6 miles upstream from Chattanooga, Tennessee, and it is estimated that construction will be completed in December 1939, at an initial cost of \$40,435,645 and an estimated ultimate cost of \$45,333,645. The dam will be 104 feet high; 6,025 feet long; have a normal reservoir area of 32,000 acres; a reservoir shore line of 502 miles; an initial installed generating capacity of 50,000 kw. and an ultimate generating capacity of 100,000 kw.

34. On July 15, 1936, TVA began construction of Fowler Bend Dam and power project located on the Hiwassee River [fol. 739] in North Carolina about 75.8 miles above the confluence of said river with the Tennessee River, and it is estimated that construction will be completed in October 1940,

at an initial cost of \$17,296,061, and an estimated ultimate cost of \$22,491,561. The dam will be 292 feet high; 1,250 feet long; have a normal reservoir area of 6,240 acres; 150 miles of reservoir shore line; and an ultimate generating capacity of 80,000 kw.

35. TVA has announced its intention to construct Watts Bar Dam and power plant on the Tennessee River, and Congress has allocated in its appropriations specific funds for preliminary investigation of a site which has been selected and which is located approximately 530 miles above the mouth of said river. Preliminary work has been done, and construction is scheduled to begin in the near future. The estimated initial cost of the dam and power plant is \$29,200,000, and the estimated ultimate cost is \$39,800,000. The dam will be 2,900 feet long and have a normal reservoir area of 42,600 acres and will have an ultimate installed generating capacity of 150,000 kw.

36. TVA has announced its intention to construct Coulter Shoals Dam and power project on the Tennessee River, and Congress has allocated in its appropriations specific funds for preliminary investigation of a site which has been tentatively selected approximately 30 miles below Knoxville, at which site some preliminary work has been done. The dam will be 2,070 feet long and will have a normal reservoir area of 11,900 acres, and the estimated initial cost of such dam and power plant is \$25,000,000, and the estimated ultimate cost is \$30,000,000. The ultimate installed generating capacity will be 60,000 kw.

[fol. 740] 37. TVA has announced its intention to construct the Gilbertsville Dam and power plant on the Tennessee River in Kentucky 22.5 miles above the mouth of said river, and Congress has allocated in its appropriations specific funds for preliminary investigation of a site. Preliminary work has been done at the dam site, and construction is scheduled to begin within the near future. The dam will be 150 feet in height; 8,300 feet in length; have a normal reservoir area of 160,000 acres; and have an ultimate generating capacity of 192,000 kw. Its estimated initial cost is \$95,000,000, and the estimated ultimate cost is \$112,000,000.

38. The Tennessee Valley Authority has constructed or has under construction or has under investigation for con-

struction a series of high dams and reservoirs, 7 on the main stream of the Tennessee River and 2 on principal tributaries of the Tennessee: the Clinch and the Hiwassee Rivers.

39. These dams, when completed, will provide a continuous 9-foot navigable channel with adequate overdepths for boats of 9-foot draft over the entire distance from the mouth of the Tennessee at Paducah, Kentucky, to Knoxville, Tennessee, a distance of approximately 650 miles; will substantially alleviate the destructive floods in the Tennessee and Mississippi Valleys; and will also create a substantial amount of water power.

40. Beginning at the mouth of the Tennessee River at Paducah, Kentucky, and extending upstream, the dams under control of the Authority already constructed or under construction or active investigation for construction are as follows:

[fol. 741] Gilbertsville Dam, which is located in Kentucky 22.7 miles from the mouth of the river, and on which preliminary investigations by the Authority are in progress.

Pickwick Landing Dam, which is located in Tennessee 206.7 miles from the mouth of the river and which is under construction by the Authority and almost completed.

Wilson Dam, which is located at Muscle Shoals, Alabama, 259.4 miles from the mouth of the river, which was constructed by the United States Army Engineers and transferred to the Authority under the Tennessee Valley Authority Act and which is now in operation.

Wheeler Dam, which is located in Alabama 15.5 miles above Wilson Dam and 274.9 miles from the mouth of the river, and construction of which was commenced by the United States Army Engineers, completed by the Tennessee Valley Authority, and which is now in operation.

Guntersville Dam, which is located near Guntersville, Alabama, 349 miles from the mouth of the river and which is under construction by the Authority.

Chickamauga Dam, which is located near Chattanooga, Tennessee, 471 miles from the mouth of the river and which is under construction by the Authority.

Watts Bar Dam, which is located in Tennessee 529.9 miles from the mouth of the river and on which preliminary investigations by the Authority are in progress.

Coulter Shoals Dam, which is located in Tennessee 602 miles from the mouth of the river and on which preliminary investigations by the Authority are in progress.

[fol. 742] The dams constructed or under construction on tributaries are as follows:

Norris Dam, located in Tennessee on the Clinch River 79.8 miles from the mouth of that river and 647.5 miles from the mouth of the Tennessee River, constructed by the Authority, now completed and in operation.

Hiwassee Dam, located in North Carolina on the Hiwassee River 75.8 miles from the mouth of that river and 560.3 miles from the mouth of the Tennessee River, under construction by the Authority.

The Tennessee Valley Authority has also recommended to the Congress the future construction of a third tributary project at the Fontana Dam site in North Carolina on the Little Tennessee River, but the Congress has appropriated no funds for this purpose, and neither construction nor preliminary investigation or other work is in progress on this project.

41. Each of the dam projects of the Authority is located on a site at or near the site selected by the United States Army Engineers in their comprehensive report on the Tennessee River system, set forth in House Document No. 328, Seventy-first Congress, second session. The projects so described in that report were designed primarily for navigation and flood control. Prior to the passage of the Tennessee Valley Authority Act the United States Army Engineers in fact had plans for a high dam at the site of the present Wheeler Dam. Their design made provision for intakes for the later installation of power facilities. Prior to the passage of the Tennessee Valley Authority Act they had commenced construction of the lock for this project. The lock and dam as completed by the Authority are sub-[fol. 743] stantially similar in design to the project as designed by the Army Engineers.

42. Each of the projects of the Authority has all elements of design reasonably required for navigation and flood control in accordance with accepted engineering standards. Each of the projects has been designed to provide storage capacity for a slackwater pool behind the dam and a substantial additional storage capacity above the slackwater pool level. Each of the main-stream projects is equipped

with a lock prescribed and designed by the Corps of Engineers, with space for an additional parallel lock when commerce warrants. The locks which are being installed are of sufficient size and capacity to accommodate adequately the traffic which may be expected in the reasonably near future. To provide effective means for flood control and stream-flow regulations, each of the projects is equipped with large spillway gates, and in addition, the tributary projects are equipped with sluiceways of large capacity. At each of the projects facilities have been provided or construction and design are such that facilities may be provided for the generation of power. Each of the projects of the Authority can be operated to secure substantial benefits in the improvement of navigation and the control of destructive floods, and consistently therewith, the production of electric energy.

43. The following tables set forth the principal engineering features of the projects of the Authority, Lock and Dam No. 1 constructed by and under the control of the War Department, and the privately owned Hales Bar Dam:

[fol. 744]

(1) Project	(2) Miles above River Mouth	(3) Drainage Area Sq. Mi.	(4) Length of Res. Miles	(5) Elev. Top of Gates	(6) Normal Pool Level	(7) Low Pool Level at Dam	(8) at Dam Upstr.	(9) Reservoir Volumes		(11) Flood Control
								Total to Top of Gates	Low Water Regulation	
Gilbertville.....	22.7	40,000	184.0	375	359	350	354	6,150,000	750,000	4,600,000
Pickwick.....	206.7	32,870	52.7	418	413	408	408	1,082,000	191,000	416,000
Lock & Dam No. 1.....	256.8			416	416					
Wilson.....	259.4	30,800	15.5	505.8	506.1	503	503	600,000	43,000	43,000
Wheeler.....	274.9	29,900	74.1	556	555	548	550	1,100,000	280,000	440,000
Guntersville.....	349.0	24,300	82.1	595	594	591	593	951,000	62,000	242,000
Halas Bar.....	431.0	21,800	39.9	629.2	626.2			100,000		
Chickamauga.....	471.0	20,800	58.9	685.0	682.0	673.5	675	639,000	195,000	325,000
Watts Bar.....	529.9	17,460	72.1	745	740	736	736	1,132,000	140,000	337,000
Coulter Shoals.....	642.0	9,600	56.0	815	810	805	805	370,000	60,000	140,000
Norris.....	79.8	2,950	71-Cl.	1034	1020	955		2,567,000	1,500,000	2,030,000
Hilwassee.....	75.8		52-Po.							
	576.3	977		1526	1526	1415		435,000	362,000	362,000
Total.....										
Tributary.....								4,034,000		8,925,000
Main River.....								1,863,000		2,862,000
								2,172,000		6,543,000

Col. (7) is the lowest elevation to which the reservoir will usually be drawn for flood control and, at the main-stream dams, is the usual allowable drawdown with normal wet season flow to give the elevation shown in col. (8) at the next dam upstream, resulting in a minimum navigable depth of 9 feet, with 2 feet over-depth. This elevation is sometimes also referred to as "minimum drawdown elevation" or "minimum navigation level" or "maximum drawdown."

Col. (10) is the difference in the volumes for elevations in columns (6) and (8).

Col. (11) is the difference in the volumes for elevations in columns (5) and (7).

Normal pool level in column (6) is an arbitrary level generally defining the maximum level to which the pool will be raised in low-water season except for possibly a temporary rise of one foot above this caused by malarial control fluctuations.

[fol. 745]

Project	Elev. Spillway Crest	Number & Size Spillway Gates	Spillway Disch. Capacity c. f. s.	Elev. Lower Lock Sill	Elev. Upper Lock Sill	Size of Lock Chamber Feet	Power Units Installed or Authorized	Ultimate Power Units Provided For
Gilbertsville.....	330	24-45 x 40	850,000			110 x 600		6-32,000 KW
Pickwick.....	378	22-40 x 40	820,000	342.2	398.0	110 x 600	2-36,000 KW	6-36,000 KW
Lock & Dam No. 1.....	416			394.1	406.6	60 x 300		
Wilson.....	487	58-18 x 38	629,000			60 x 300	4-20,000 KW	4-20,000 KW*
Wheeler.....	541	60-15 x 40	687,000	491.0	534.0	60 x 300	4-26,000 KW	14-26,000 KW*
Guntersville.....	545	18-40 x 40	625,000	538.0	578.0	60 x 360	4-32,000 KW	8-32,000 KW
Hales Bar.....	626.2	Flash boards 3 ft. high				60 x 360	3-24,000 KW	4-28,000 KW
Chickamauga.....	655	20-40 x 40	600,000	618.2	663.0	60 x 257		
Watts Bar.....	720	21-25 x 40				60 x 360	3-27,000 KW	4-27,000 KW
Coulter Shoals.....	790	20-25 x 40				60 x 360		4-37,500 KW
Norris.....	1020	3-14 x 100	205,000				2-50,000 KW	3-20,000 KW
Hivasee.....	1503.5	7-23 x 32	130,000				1-60,000 KW	2-60,000 KW

* Provision for the ultimate installation of all these units was made by the United States Army Engineers in Wilson Dam as originally constructed. The dam as completed by them included the completed power house, with eight generating units installed and provision made for installation of the additional ten generating units

[fol. 746] 44. The engineers of the Authority in responsible charge have determined, on the basis of a study of all available records, upon a method of operation for the Authority's projects which in their opinion is the most effective method of operation for the improvement of navigation and the control of destructive floods on the Tennessee and Mississippi River Valleys. This is a method of operation which in their opinion is best adapted for the combined purposes of improvement of navigation and the control of destructive floods without reduction in the effectiveness of the Authority's projects for either navigation or flood control. The general method of operation is set forth in the report of the Board of Directors of the Tennessee Valley Authority entitled, "The Unified Development of the Tennessee River System," pages 18-19, which is complainants' exhibit 328 in this case. Some details of operation have been changed in the past, and according to the Authority's engineers in responsible charge, other changes may be necessary in the future as further investigations and experience may require.

45. The engineers of the Tennessee Valley Authority in responsible charge operate the projects of the Authority substantially as follows: The reservoir levels of the main-stream dam below Chattanooga are held somewhat above low pool level during the flood season and drawn down to or below such level in advance of a flood; those above Chattanooga are to be held at about low pool level during flood season. As the flood season draws to a close, about the beginning of April, reservoir levels on the main stream [fol. 747] are allowed to rise. The reservoir levels of the tributary projects are maintained at about low pool level at the beginning of the flood season, and a substantial portion of the storage capacity below so-called normal pool level is gradually filled during and after the flood season. A sufficient capacity is held available at the close of the flood season to control the largest run-off that may be expected at that time. The water stored in the reservoirs on the tributaries and the main stream is released during the low-water season to augment the low-water flow.

46. The general method of operation set forth in finding 45 conforms to the method of operation for navigation and for flood control contemplated in House Document No. 328 and House Document No. 259 and is reasonably calculated

to provide most effectively for the improvement of navigation and the control of destructive floods in the Tennessee and Mississippi River Valleys without reduction in the effectiveness of the Authority's projects for either flood control or navigation.

47. While dams and reservoirs of limited capacity designed for local flood protection only should, according to some engineering opinion, be kept empty in advance of floods and emptied immediately after floods, those principles govern the design and method of operation of dams and reservoirs established for local protection alone and do not apply to the projects of the Tennessee Valley Authority, which are designed and operated for the protection of points on the Tennessee, the lower Ohio, and the lower Mississippi, and for navigation, as well as for local flood protection.

[fol. 748] Status of Navigation on the Tennessee River

48. The Tennessee River, a navigable river approximately 652 miles long, is formed by the junction of the French Broad River and the Holston River at Knoxville, Tennessee, and enters the Ohio River near Paducah, Kentucky. In its unimproved state there were numerous obstacles to commercial navigation, including shoals and bars, steep slopes, high velocities, and floods in many months of the year, and inadequate depths in a great proportion of the river.

49. The problem of improving navigation on the Tennessee River has been a matter of national concern for more than a hundred years. From 1852 to 1933 Congress authorized and made appropriations for numerous navigation surveys and navigation projects covering all portions of the Tennessee River and certain of its tributaries, at a total expenditure of approximately \$18,000,000, exclusive of Wilson Dam.

50. Prior to the passage of the Tennessee Valley Authority Act the Tennessee River was not adequately improved for modern commercial navigation except for short stretches behind the Government-owned Dam No. 1 and Wilson Dam, and the privately owned Hales Bar Dam. The controlling depth of the river at that time ranged from

4½ feet in the lower part of the river to 1 foot in the upper section.

51. The Tennessee River, as a tributary of the Ohio River, is interconnected with the inland waterway system of the Mississippi River, which connects the Gulf and the Great Lakes and taps the territory of about 15 States, including many important traffic-producing industrial, commercial, and agricultural centers, and extends as far east as Pittsburgh, Pennsylvania, as far west as Kansas City, Missouri, and as far north as Minneapolis and St. Paul, Minnesota. Interstate railroads and highways interconnect with the waterway at numerous points, permitting joint land and water transportation. There are varied and substantial agricultural, mineral, and forest resources located in the Tennessee Valley within reach of the waterway. About 18.2% of the population of the United States, based on the 1930 census, is located within 25 miles of the banks of this interconnected waterway. This inland waterway system includes 5,700 miles of improved waterway of 9-foot depth or over, an additional 3,200 miles of 6- to 9-foot depth, and an additional 1,000 miles of 4- to 6-foot depth.

52. The dams constructed, under construction, or authorized for construction or investigation by the Tennessee Valley Authority will provide a navigation channel throughout the length of the Tennessee River substantially superior to that which could be provided by any alternative method of navigation improvement. They will also provide substantial navigation improvement on a number of the tributaries of the Tennessee River and will provide an increased water supply, which will substantially improve navigation on the Mississippi River in the low-water season.

53. Each of the dams constructed, under construction, or authorized for construction or investigation by the Tennessee Valley Authority will result in a substantial improvement for navigation.

[fol. 750] 54. The high-dam projects of the Authority will provide a navigation improvement substantially superior to that which could be provided by the system of low dams set forth in House Document No. 328. The superiority of high dams for navigation was recognized by the Board of Engineers for Rivers and Harbors in House Document No. 328.

The Authority's projects will provide superior channel depths and widths, substantially fewer lockages, substantially less current velocities, pool fluctuations, and interruptions from floods. The elimination of lockages will substantially reduce the time consumed in lockages; the superiority of channel depths and reduction of current velocities will substantially increase the speed of movement and reduce the amount of motive power required; and the wider and longer pools of the high dams are preferred by the navigator to the narrow, crooked pools of the low dams. The reduction in pool fluctuations will greatly encourage the development of terminal facilities necessary to the development of commercial navigation. The advantages of the Authority's projects in these respects will insure a substantially greater efficiency of the navigation channel, substantially greater dependability of service, and may reasonably be expected to attract a substantially greater volume of traffic on the improved river. The high dams will also provide substantial improvement of navigation on the tributaries which would not be provided by the low-dam projects. The advantages of high dams cannot be accurately measured in monetary terms. The boats and barges which are now in general use on the interconnected inland waterways of the Mississippi River system will be able to navigate the Tennessee River where improved by the projects of the Authority without change of design or extent of loading.

55. On other tributaries of the Mississippi the United States Army Engineers are now replacing certain low dams with high dams, with provision for the development of power, and at the time of the creation of the Tennessee Valley Authority they were engaged in the construction of a lock for a high navigation dam at the Wheeler Dam site, with provision in their design for the development of power.

56. The improved navigation channel provided by the projects of the Authority will cause a very substantial increase and development in waterway traffic between the Tennessee Valley region and other regions of the United States connected by water, rail, and highway. Despite the numerous obstacles in the past to commercial navigation on the Tennessee River, the traffic on the river over the last 40 years has been between 1,000,000 and 2,000,000 tons annually, but due to lack of adequate depths the traffic has

consisted largely of short hauls. It was estimated by the Army Engineers in House Document No. 328 that there would be an increase of traffic of approximately 7,000,000 tons per annum at a saving of about \$10,000,000 annually (or a saving of approximately 25% of the present freight charges) if the Tennessee River were adequately improved for commercial navigation. Subsequent studies since the creation of the Tennessee Valley Authority have confirmed the reasonableness and conservative character of this estimate. On the basis of the growth of traffic experienced on the comparable improved waterways of the interconnected Mississippi River system it is reasonable to expect an ever increasing growth in the volume of traffic on the river.

[fol. 752] 57. The value of the improvement to navigation provided by the projects of the Authority is not limited to the reduction in the cost of transportation to shippers, but includes substantial intangible values, such as the stimulation of the growth of industry and business and the promotion of the general prosperity of the region within the influence of the improved waterway.

The Flood Problem on the Tennessee and Mississippi Rivers

58. The recurrent great floods on the Tennessee and Mississippi Rivers have long presented a grave flood menace of national importance. Thousands of miles of interstate railways and highways, and 20,000,000 acres of the richest cotton lands in the United States, the products of which are normally marketed in interstate and foreign commerce, lie within the flood plain of the Mississippi Valley. Located in the path of Mississippi floods also are the important commercial cities of Memphis, Cairo, and New Orleans, and other smaller communities, in which are located large cotton warehousing, compressing, and processing plants, and woodworking plants, engaged in the production, processing, and distribution of goods normally marketed in interstate and foreign commerce. The city of Chattanooga, which is the principal point of danger on the Tennessee River, is an important center of interstate railways and highways and manufacturing plants, and is a principal center for the distribution throughout the southeastern region of commodities produced in other States.

59. The great floods of the past on the Tennessee and Mississippi Rivers have caused and unless controlled in

[fol. 753] the future will cause complete interruption of transportation on the Mississippi and Tennessee Rivers, and complete interruption of interstate commerce on the railroads and highways, as well as interruption in the production, manufacture, and distribution of products normally marketed in interstate and foreign commerce, and substantial damage to the facilities and properties employed for these purposes.

60. For the most effective control of destructive floods in the Tennessee River basin, particularly in the critical area at Chattanooga, Tennessee, it is desirable to provide high dams with controlled storage (such as the projects of the Authority) on the main stream of the Tennessee and on the principal tributaries above Chattanooga, including the Clinch and Hiwassee Rivers, in order to supplement local protective works.

61. The Ohio River and its tributaries, including the Tennessee River, are the largest contributor to all Mississippi floods, contributing from 52% to 90% of the floods between Cairo, Illinois, and Helena, Arkansas. The Tennessee River has always made a substantial contribution to all Mississippi floods.

62. The existing flood-protection works on the lower Mississippi River, consisting of levees supplemented by floodways and cut-offs, are inadequate to pass a flood such as is now estimated to be reasonably probable in the future without disastrous overtopping of the existing levees. Even in lesser floods the existing projects provide adequate protection for only 60% of the alluvial valley, and then only with the use of the floodways, the use of which it is desirable to eliminate whenever possible. The levees on the lower Mississippi have reached the practical limits of height. Any additional protection against lower-Mississippi floods must be found in part in the provision of reservoirs on the tributaries of the Mississippi to reduce their contribution to Mississippi floods. For the most effective flood-control use, reservoirs should be located close to Cairo, which is at the junction of the Ohio and the Mississippi Rivers.

63. The Tennessee River, being the largest tributary of the Ohio and closer to Cairo and the lower Mississippi than any other major tributary of the Ohio system, is one of the

best rivers for reservoirs for flood control on the lower Mississippi. For the most effective reduction of the contribution of the Tennessee River system to Mississippi floods it is necessary to provide high dams with controlled storage (such as the projects of the Authority) on the main stream and storage dams on the tributaries, including the Clinch and Hiwassee Rivers.

64. The season of major floods in the Tennessee River basin is limited to the period from approximately the middle of December to about the first of April. No major flood of record has occurred in the Tennessee basin outside this period; floods occurring outside this flood season are of limited volume and duration, and are local in effect. The season of major floods on the lower Ohio and lower Mississippi lasts about a month later than the flood season on the Tennessee, but as the end of the Tennessee flood season approaches, the need for storage capacity to control the contribution of the Tennessee to Ohio and Mississippi floods diminishes.

65. Each of the projects of the Authority is of substantial value for the reduction of destructive flood heights in the Tennessee and Mississippi River basins.

66. The controlled-storage projects of the Authority are the only types of engineering works on the Tennessee River system which will afford effective flood control in both the Tennessee and Mississippi River basins. Automatic, uncontrolled detention reservoirs are of uncertain value for local Tennessee flood control and would be of no value for the control of floods on the lower Mississippi. The so-called natural valley storage in the Tennessee River basin is the space occupied by the flood itself, and the retarding effect of such uncontrolled valley storage may increase the danger of Mississippi floods. The low dams set forth in House Document No. 328 would be of no value in the control of destructive floods either in the Tennessee or Mississippi River basins, as was recognized in House Document No. 328.

67. Pursuant to congressional authorization a comprehensive survey of the Tennessee River system with respect to navigation, flood control, and conservation of power resources was undertaken by the Corps of Engineers of the War Department and completed in 1930. This report is

contained in House Document No. 328, Seventy-first Congress, second session. The recommendations contained in this report were adopted by Congress in the Rivers and Harbors Act of 1930 and provided for the creation of a 9-foot navigation channel throughout the length of the [fol. 756] Tennessee River by a series of movable low dams to be constructed by the Federal Government or a series of high dams to be constructed by private interests in co-operation with the Federal Government. The preliminary estimate of cost of the low dams was approximately \$75,000,000. In 1935 the Mississippi River Commission, in a comprehensive report on reservoir projects for Mississippi flood control, set forth in House Document No. 259, Seventy-fourth Congress, first session, recommended that the Federal Government adopt a policy of encouraging the construction of reservoirs on the tributaries of the Mississippi River for increased flood protection on the lower Mississippi. In April 1937 the Chief of Engineers, in a report set forth in Committee Document No. 1, Seventy-fifth Congress, first session, recommended the construction by the Federal Government of storage reservoirs on the tributaries of the Mississippi as essential for the control of floods on the lower Mississippi. Neither at the time of the enactment of the Tennessee Valley Authority Act nor since has there been any reasonable prospect that a comprehensive development of the Tennessee River and its tributaries for the combined purpose of navigation and flood control in the Tennessee and Mississippi River basins could be obtained in any other way except by the construction of high dams by the United States Government or some agency thereof.

[fol. 757] Combined Benefits to Navigation and Flood Control From the Tennessee Valley Authority Projects

68. The projects of the Authority will permit the maintenance at all times of the 9-foot channel on the main stream of the Tennessee with sufficient overdepths to accommodate boats of 9-foot draft. The tributary projects on the Clinch and Hiwassee Rivers will also permit the maintenance of slackwater pools in the lower portions of the reservoirs, which is necessary on the Clinch, a navigable tributary, in order to preserve existing navigation and to avoid foreclosing future improvement for navigation, and is valuable on both tributaries in order to preserve the life of the projects by affording capacity for the deposit of silt. The proj-

ects of the Authority will also provide substantial storage space above slackwater pool level to control in whole or in part the run-off from the drainage area above the dams during the flood season. Such projects are the only engineering works which can provide effective flood control in conjunction with the continuous maintenance of the 9-foot channel for navigation.

69. The tributary projects of the Authority, by reducing flood flows and increasing low flows, will substantially increase the effectiveness of the high dams on the main stream for the reduction of flood heights on the Mississippi and Tennessee Rivers in combination with the maintenance of a 9-foot navigation channel. These tributary reservoirs will also serve to increase materially the navigable depths in the unimproved portions of the main stream for navigation, will substantially increase the navigable depths in the upper [fol. 758] ends of the navigation pools created by the main-stream projects, and will substantially increase the navigable depths on the lower Mississippi River, which increases will be of material benefit to navigation.

70. The low-dam plan recommended in House Document No. 328 as an alternative navigation project would have no flood-control value. The low-dam plan in conjunction with detention reservoirs on the tributaries might together accomplish navigation improvement and flood control on the Tennessee River, but this combination would contribute nothing to flood control in the Mississippi River, might aggravate flood conditions there, and would provide navigation improvement inferior to that provided by the projects of the Authority.

71. Upon the completion of the construction of the Pickwick Landing project and the Gunter'sville project, these two projects, in conjunction with the already-completed Wheeler Dam and the previously existing Wilson Dam, will provide a 9-foot channel from Pickwick Landing to the vicinity of Chattanooga, a distance of approximately 257 miles. The completed Norris Dam is being operated to provide a navigation channel of 7-foot minimum depth in the 207-mile stretch between Pickwick Landing and the mouth of the Tennessee River. This 7-foot depth below Pickwick will be increased to $7\frac{1}{2}$ feet upon completion of Hiwassee. These projects together will provide a commercially feasible

navigation channel between Chattanooga, Tennessee, and the inland waterway system. For the larger part of each year there will be a through navigation channel of 9-foot depth from Chattanooga to the mouth of the river, and even prior [fol. 759] to construction of Gilbertsville, by means of a moderate amount of dredging and releases from other projects of the Authority, it is feasible to provide a permanent 9-foot channel below Pickwick Dam. Until the Gilbertsville project is constructed, which may not be for many years, it is necessary to store a substantial amount of water in the tributary reservoirs during the high-water season to provide the low-water releases required for this improvement to navigation.

72. The increase of the low-water flow by means of the storage of water during the high-water season at Norris Dam and the release of such water during the low-water period has increased and will substantially increase the continuous water power available at Wilson Dam and will increase the value of Wilson Dam for all purposes.

73. Since completion, Norris Dam has been successfully operated to improve substantially the navigation channel of the Tennessee River between Wilson Dam and its mouth, to prevent a probable flood at Chattanooga in the year 1936, and to hold off from the peak of the Mississippi River flood of 1937 approximately 28,000 c.f.s., the Norris Dam storing the entire flow of the Clinch River for 6 weeks during the 1937 Mississippi flood.

74. The operation of Norris Dam since its completion has also increased the amount of water power available in the low-flow season at the existing Government-owned Wilson Dam, but the operation of holding and releasing waters has been directed primarily to navigation and flood control and the protection of construction works below. The same is true of Wheeler Dam, which has been operated since its [fol. 760] completion in 1936 to maintain a 9-foot navigation channel 74 miles to the site of the Gunter'sville project and to reduce flood waters and protect construction works at the Pickwick project. Approximately 85% of the water released from Norris during the year 1937 was of benefit only to navigation and flood control, and was not required or useful for production of power. The temporary storage and releases of water for power-peaking purposes have been at all times

subordinated to the requirements of navigation and flood control, and have never been permitted to interfere with or affect the continued maintenance of the stream flow required for navigation or the storage required for flood control. Temporary abnormal conditions, such as the necessity of operating for the protection of the Authority's construction works, have materially affected the operation of the Norris and Wheeler projects.

75. The projects of the Authority are designed primarily for the improvement of navigation and the control of destructive flood waters. The sequence of development has been determined according to the requirements of navigations have been uniformly obeyed.

76. The projects of the Authority which are completed and in operation have been and are operated primarily for navigation and flood control, and the responsible officers of the Authority charged with the operation of such projects are required by instructions from the board of directors to operate them primarily for such purposes. These instructions have been uniformly obeyed.

[fol. 761] 77. The approximate length and maximum width of the pools upon the Tennessee River created by the TVA unified plan will be:

Dams	Length of Pool	Maximum Width
Gilbertsville.....	184.2 miles	6 miles
Pickwick Landing.....	50.1 miles	1-1/2 miles
Wheeler.....	74.1 miles	3-1/2 miles
Guntersville.....	82.1 miles	3 miles
Chickamauga.....	59.9 miles	2-1/2 miles
Watts Bar.....	73.4 miles	1-1/2 miles
Coulter Shoals.....	48.8 miles	1/2 mile

78. Commerce upon the Tennessee River between 1927 and 1934 averaged 1,750,000 tons per year, for which the average haul was 23 miles, which consisted 82% in the transportation of sand and gravel, 9% in the transportation of various forest products, and 9% in the transportation of iron, steel, lime and cement. Since the creation of TVA Government traffic has constituted a substantial portion of the total traffic, amounting to 52% in 1935 and 54% in 1936 of the total traffic. The average annual value of such cargoes was \$11,000,000, on which the average annual sav-

ings of water transportation over land transportation was \$2,000,000. There have been no significant or substantial movements of commerce upon the tributaries of the Tennessee River.

79. There is no advantage accruing to navigation upon the Tennessee River by shutting off the flow from Norris Dam [fol. 762] entirely on Sundays and Labor Days as was done during August and September 1936. This method of operation is entirely consistent with the operation of dams primarily for navigation and flood control.

80. It would not be practical or feasible to construct a belt coal conveyer to pass coal from barges on the reservoir at Norris Dam to other barges below Norris Dam to be transported upon the Tennessee River.

81. Practically all of the property damage from floods in the Tennessee Valley occurs at and above Chattanooga, Tennessee.

82. Flood damages in the Tennessee River below Chattanooga are relatively small in amount and, while including some damage to highways and railroads (easily eliminated by relocation), consist largely of damages to farm crops resulting from the overflow of rich valley lands. The construction of the TVA unified plan will overflow permanently thousands of acres more of such valley farm land than is now occasionally overflowed by floods. At the present time such occasional overflows generally take place before the crop season and their results are beneficial to the land.

83. Less than 8% of the total population in towns and cities upon the Tennessee River and its tributaries, which in 1930 was 341,522, is below Chattanooga.

84. The estimated average annual damage from all floods to all classes of property on the Tennessee River and its tributaries is \$1,441,208, of which \$1,356,053 occurs at and above Chattanooga.

[fol. 763] 85. A flood-control program to achieve the maximum practical protection upon the Tennessee River and its tributaries should be directed primarily for protection at and above Chattanooga.

86. The greatest flood to be anticipated upon the Tennessee River and its tributaries would result in a stage at

Knoxville of 68.3 feet, with a maximum flow of approximately 620,000 second-feet; in a stage at Loudon of 71.5 feet, with a maximum flow of approximately 605,000 second-feet; in a stage at Chattanooga of 73 feet, with a maximum flow of approximately 680,000 second-feet. The previous maximum recorded stage was at Knoxville 44.4 feet; at Loudon 47.0 feet; and at Chattanooga 57.9 feet.

The Conservation of Water Power

87. The development of firm power by hydroelectric project is controlled by the amount of power that can be produced by the project both at extreme low water and extreme high water.

88. The load factor of a public utility system is the ratio of the average demand for power on that system expressed in kw. to the maximum demand for power on that system, and in the Tennessee basin area is about 60%.

89. At 100% load factor the firm capacity of Wilson Dam, excluding United States Nitrate Steam Plant No. 2, before the capacity of Wilson Dam was increased by the TVA dams upon the Tennessee River and its tributaries, was approximately 28,000 kw., and the firm energy was 242,600,000 kwh. per year. At 60% load factor 145,600,000 kwh. per year of firm energy would be produced by Wilson [fol. 764] Dam power plant. The operation of the tributary reservoirs under the TVA high-dam program solely for regulation of the river will increase the firm-power capacity of Wilson Dam at 60% load factor by 151,300 kw. per year and the firm energy by 795,200,000 kwh. per year.

90. At 100% load factor the operation of the tributary reservoirs solely for regulation of the river would increase the firm-power capacity of Wilson Dam by 79,700 kw. and the firm energy by 698,200,000 kwh. per year.

91. The operation of Norris Dam in June of 1936, by increasing the low-water flow of the Tennessee River and by the generation of power, was sufficient to double the firm-power capacity of the TVA system as it existed at that time.

92. The tributary reservoirs under the TVA unified plan will greatly increase the firm power produced by the projects upon the Tennessee River.

93. The projects of the Tennessee Valley Authority are the only type of dams which will conserve the water resources of the Tennessee River system for navigation, Tennessee and Mississippi flood control, water power, and other beneficial uses. The available sites on the Tennessee River system for the construction of dams and reservoirs are strictly limited in number, and those available for flood control coincide in many instances with those required for the regulation of the river for other purposes. The utilization of such sites exclusively for local flood protection would preclude the development of the water resources for [fol. 765] any other purposes. The construction of low dams on the main stream of the Tennessee River for navigation would waste the resources of the river for any other purpose. It would be physically impossible to provide the high dams on the main stream necessary for the development of flood control and power without the wasteful removal or duplication of such low dams.

94. The construction and operation of the projects of the Authority for navigation and flood control will provide a head for power by concentrating the fall of the river at certain points on the Tennessee River system and will substantially augment the minimum flow in low-water season. Water power is a function of head and stream flow. The amount of continuous power is determined by the available head and the minimum flow in low-water season. Continuous power is power available 24 hours a day, every day of the year, in every year. When operated for the improvement of navigation and the control of destructive floods the dams constructed, under construction, or under investigation for construction by the Tennessee Valley Authority will provide, in addition to the benefits to navigation and flood control set forth in previous findings and without reduction in the effectiveness of these projects for navigation and flood control, a large amount of continuous power.

The firm-power capacity, as distinguished from the continuous power, is the maximum demand which the system can reliably supply, having regard to the energy available, the generating units installed, the load factor, and other characteristics of the system. With the complete generating [fol. 766] units which have already been installed or are under contract for installation at Norris, Wheeler, Gunterville, Wilson and Pickwick Landing Dams, the dams con-

structed or under construction by the Tennessee Valley Authority will have a firm power capacity of 395,000 kw. Together with the additional generating units at these dams and at Hiwassee and Chickamauga Dams which have been authorized by the Board of the Tennessee Valley Authority and for which appropriations have either been made or requested, the dams constructed or under construction by the Tennessee Valley Authority will have a firm-power capacity of 570,000 kw.

[fol. 767] Stock Ownership, Business, Franchises and Properties of Complainants

95. The National Power & Light Company, 46.56% of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns the following percentages of the total outstanding voting stock of the following complainants:

Birmingham Electric Company.....	100.00%
Carolina Power & Light Company.....	93.53%
Holston River Electric Company.....	100.00%
Memphis Power & Light Company.....	86.75%
Tennessee Public Service Company.....	99.31%
West Tennessee Power & Light Company.....	100.00%

96. The Electric Power & Light Corporation, 46.20% of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns 94.03% of the voting stock of the complainant Mississippi Power & Light Company.

97. The American Gas & Electric Company, 17.51% of whose outstanding voting stock is owned by the Electric Bond & Share Company, owns 100% of the voting stock of the complainant Appalachian Electric Power Company, which in turn owns 100% of the voting stock of complainants Kingsport Utilities, Inc., and Kentucky & West Virginia Power Company.

98. During the past 5 years the Electric Bond & Share Company has voted the following approximate percentages of the total number of shares of voting stock represented at stockholders' meetings:

National Power & Light Company.....	62%
Electric Power & Light Corporation.....	77%
American Gas & Electric Company.....	25%

[fol. 768] Throughout the history of these companies there has been no instance in which there has been any contest over proxies or in which any interests hostile to the managements have organized opposition to the programs or policies of the respective managements or to the election of directors voted for by proxies designated by such managements.

99. The Commonwealth & Southern Corporation owns 91.40% of the outstanding voting securities of the Alabama Power Company; 100% of the outstanding voting securities of the Georgia Power Company, Mississippi Power Company, and Southern Tennessee Power Company; and 64.43% of the outstanding securities of The Tennessee Electric Power Company.

100. All of the common and preferred stocks of the complainant East Tennessee Light & Power Company are owned by the Cities Service Power & Light Company. All of the common stock of the complainant Tennessee Eastern Electric Company is owned by the East Tennessee Light & Power Company.

101. All of the complainants are engaged in the business of generating, transmitting, distributing, and selling electricity as public utility companies, except that the Birmingham Electric Company, the Tennessee Public Service Company, the Holston River Electric Company, the Franklin Power & Light Company, the Mississippi Power Company, and the Mississippi Power & Light Company purchase practically all of their electrical requirements, and except that the Southern Tennessee Power Company neither generates nor sells power but is engaged exclusively in the business of transmitting electric energy.

[fol. 769] 102. The complainant Mississippi Power Company owns no franchises or electrical facilities in 10 counties in northeastern Mississippi. The properties in these counties were sold to the Tennessee Valley Authority under the contract of January 4, 1934, and the area is the ceded area referred to in that contract.

103. The complainant Alabama Power Company does not own any electrical facilities in 6 counties in northwestern Alabama except 9 municipal distribution systems and a high-tension 110-kv. line which crosses the territory. Un-

der the contract of January 4, 1934, the complainant Alabama Power Company transferred to the Authority all the high-voltage transmission lines leading from Wilson Dam to the municipalities in the area with the exception of a single line leading to Decatur, the substations, and all rural lines in the area.

104. Section 5 in the contract of January 4, 1934, provides that:

Alabama Company covenants and agrees to convey its urban distribution systems in the above named counties in Alabama, said distribution systems being listed in Exhibit B, to the respective municipalities in or adjacent to which such systems are located, together with all franchises, contract rights, and going business thereto appertaining, when it has agreed with any such municipality on the price to be paid for the same. Alabama Company agrees to make every reasonable effort to come to an early agreement with said municipalities for such sales. In the event that any such municipality is unable to arrive at a satisfactory price after three months of bona fide negotiation with Alabama Company, or if for some other reason the sale of any such system cannot be consummated, Authority shall have the right to serve such municipality or municipalities irrespective of whether such municipalities have purchased the distribution systems from Alabama Company.

[fol. 770] 105. A part of section 4 further provides with reference to the Alabama properties that:

Any conveyance of property shall include not only the physical property, easements and rights-of-way, but shall also include all machinery, equipment, tools and working supplies set forth in the respective exhibits, and all franchises, contracts and going business relating to the use of any of said properties, without extra charge.

106. With a few minor exceptions (a few small industrial customers in the so-called ceded area in Alabama and approximately 3,000 employees on Government reservations and rural customers in the vicinity of Norris Dam and Wilson Dam), all of the Authority's sales are either at wholesale to municipalities, rural cooperatives, and utilities, or to very large industrial customers purchasing both

firm and secondary power in large bulk lots for operations not previously served by any of the complainants.

107. During the period of the contract of January 4 the Authority sold power under the first proviso of section 7 of the contract to the following municipalities:

Dayton, Tennessee.
 Dickson, Tennessee.
 Pulaski, Tennessee.
 Amory, Mississippi.
 Okolona, Mississippi.

108. Under the third proviso of section 7 of the contract of January 4 the Authority contracted to sell and has sold electricity in substantial amounts to the Meigs County Electric Membership Corporation, the Monroe County Electric Power Association, and a number of rural customers served directly by the Authority in Roane County, Tennessee, near Norris Dam.

[fol. 771] 109. Under the last proviso of section 7 of the contract of January 4 the Authority contracted to sell and has sold electricity in substantial amounts to, Cullman County Electric Membership Corporation, Duck River Electric Membership Corporation, Middle Tennessee Electric Membership Corporation, North Georgia Electric Membership Corporation, Pickwick Electric Membership Corporation, and in Lincoln County, Tennessee. The total load of these customers during the period of the contract was within the 2,500-kw maximum amount stipulated in the said proviso.

110. Under the interchange provision of the contract of January 4 the Alabama Power Company supplied power to the Authority for the construction of Guntersville Dam, and the Tennessee Electric Power Company supplied power to the Authority for the construction of Norris and Chickamauga Dams.

111. The Tennessee Valley Authority is not now constructing and has not authorized the construction of any transmission line, has not sold or authorized the sale of any electricity, and has not entered into or authorized any contracts for the sale of electricity in any part of the territory

claimed by the complainants Franklin Power & Light Company, Appalachian Electric Power Company, Carolina Power & Light Company, Holston River Electric Company, Kingsport Utilities, Inc., Kentucky & West Virginia Power Company, Tennessee Eastern Electric Company, Birmingham Electric Company, East Tennessee Power & Light Company, and Mississippi Power & Light Company, except that it has constructed a transmission line at the expense of the [fol. 772] War Department connecting the Authority's lines to the site of Sardis Dam in the claimed territory of the Mississippi Power & Light Company.

112. The complainant Southern Tennessee Power Company is engaged only as a transmission company transmitting electric energy from Wilson Dam to the Alabama-Tennessee line, thereby connecting Wilson Dam and the transmission system of The Tennessee Electric Power Company. It is not presently engaged either in the generation or distribution and sale of electric energy.

113. Adequacy of facilities means the availability in sufficient quantity of distribution, transmission, and generation facilities at all times to assure ability to take care of immediate loads and any reasonable expectant increase in load with a sufficient margin so as to assure the supplying of proper service.

114. Prudent utility management requires that a utility shall provide enough surplus capacity to take care of its actual and potential demands in the period of time during which new facilities can be added and that too great a surplus, resulting in nonproductive facilities and higher operating costs, be avoided.

115. The generating facilities of each of the following groups of companies are interconnected and integrated into a single coordinated system or power pool, and such facilities of each group are operated as a unit:

(a) The Appalachian Electric Power Company, Kentucky and West Virginia Power Company, and the Kingsport Utilities, Inc., are integrated into a single system and are [fol. 773] also interconnected with a group of affiliated companies in Ohio, Indiana, and Michigan and with nonaffiliated companies in Tennessee and North Carolina.

(b) The complainants Alabama Power Company, Mississippi Power Company, The Tennessee Electric Power Company and the noncomplainants Georgia Power Company, Gulf Power Company, and South Carolina Power Company together form the integrated system of Commonwealth & Southern Corporation in the South and also have interconnections with the Carolina Power & Light Company, the Florida Power Corporation, the South Carolina Electric & Gas Company, the Duke Power Company, and the Aluminum Company of America.

(c) The Carolina Power & Light Company, the Tennessee Public Service Company, and the Holston River Electric Company.

(d) The complainants Memphis Power & Light Company, West Tennessee Power & Light Company, Mississippi Power & Light Company and noncomplainants Louisiana Power & Light Company and Arkansas Power & Light Company.

(e) The East Tennessee Light & Power Company and Tennessee Eastern Electric Company.

116. None of the complainant companies has ever failed to meet the load requirements of their customers, nor have they ever refused additional business due to lack of facilities.

117. The complainant companies serve the electric power requirements of substantially all industrial enterprises doing business in the territories served by them, with the following exceptions:

[fol. 774] (a) Those industries now being served by TVA;

(b) Those industries which require steam in processing operation and are thus able to produce their own power as a byproduct;

(c) Those industries, such as sawmills and woodworking plants, which have waste fuel products and can produce power without fuel cost;

(d) Small and scattered enterprises, such as cotton gins, ice plants, and flour and feed mills, which operate seasonally and which depend upon steam or other mechanical power.

All of these businesses except those being served by TVA have their own power units, which would have to be abandoned in order to take central power service.

118. The complainant companies serve the electric power requirements of substantially all commercial enterprises doing business in the territory served by them, with the exception of a very few scattered rural stores which do not stay open at night.

119. The complainant companies are now serving, either directly or indirectly, substantially all of the domestic demand within the territory served by them accessible to existing company facilities.

120. The wholesale rates of the Tennessee Valley Authority are substantially lower than the wholesale rates of any of the complainants.

121. The retail rates for every class of service prescribed by TVA and charged by the municipalities and cooperatives purchasing power from the Tennessee Valley Authority are substantially lower than the retail rates of any of the complainants.

[fol. 775] 122. The rates charged by the Tennessee Valley Authority in all classes of service, including rural customers, domestic customers, and commercial customers which it serves, are substantially lower than the rates for the same classes of service of any of the complainants.

123. The industrial rates charged by the Tennessee Valley Authority are substantially lower than the published rates of any of the complainants.

124. Tennessee Valley Authority has published these rates generally, and they are well known throughout the Tennessee Valley area.

125. Substantial future damage to complainants will result from competition with TVA. This record does not establish that complainants, or any of them, will have their businesses destroyed by, or will become bankrupt because of, such competition.

[fol. 776] Power Customers and Power Contracts of the Authority

126. The Authority as of December 15, 1937, had contracts to sell power to 9 municipalities located in the ceded

area covered by the contract of January 4 with the complainants Alabama Power Company and Mississippi Power Company. Seven of these municipalities are located in the ceded area in Alabama.

127. As of December 15, 1937, the Authority had contracts for the sale of power with 7 rural cooperative corporations and 8 industrial customers located in the ceded area covered by the contract of January 4 with complainants Alabama Power Company and Mississippi Power Company.

128. The Authority has a contract to sell and is delivering power in bulk lots to the complainant Alabama Power Company on the low side of several substations acquired by the Authority under the January 4 contract, by means of transmission lines also acquired by the Authority under the contract, for service to several urban distribution systems of the company in the area covered by the contract.

129. In addition to the contracts for the sale of power in the ceded area, as of December 15, 1937, the Authority had contracts to sell power to 17 municipalities, 12 co-operatives, 3 industrial customers, and one utility company, and the requirements of the War Department for the construction of Sardis Dam.

130. The contracts with municipalities and cooperatives provide for the wholesale delivery of power in bulk lots at a [fol. 777] substation at the city gates in the case of municipalities and at a substation or metering point near the location of their respective operations in the case of cooperatives, the substations and metering equipment to be owned by the Authority.

131. The contracts with municipalities and cooperatives provide that all lines and substations from the point of delivery and all electrical equipment except the metering equipment of the Authority located on the municipality's or cooperative's side of such point of delivery shall be furnished and maintained by the municipality or cooperative.

132. Rural cooperative associations have been organized in the States of Alabama, Tennessee, Georgia, and Mississippi for the purposes of distributing TVA power. Seven such corporations have been organized in Alabama, 14 in Tennessee, one in Georgia, and 11 in Mississippi. All such cooperative associations have been incorporated since May

18, 1933, and have procured franchises in 10 counties in Alabama and 45 counties in Tennessee for the purposes of erecting, constructing, operating, and maintaining lines, and distributing and selling electricity therein.

133. TVA has financed for municipalities and cooperatives a large number of rural distribution lines and has also loaned funds to cooperatives with which to purchase urban distribution systems, including the distribution systems in the towns of Bruce, Caledonia, and Smithville, Mississippi, and Gibson, Tennessee. The indebtedness owed to TVA on this account amounted to \$1,424,665.70 as of June 30, 1936, [fol. 778] and this indebtedness had increased by June 30, 1937, to the sum of \$1,582,412.66. TVA intends to continue this policy.

134. The TVA in some instances has constructed distribution systems in advance of the organization of any cooperatives. In a number of other instances TVA has constructed lines pending their purchase by the cooperatives, agreeing to collect membership fees, to connect service to prospective customers, to render and collect bills, and perform other like services, including the furnishing of clerical and stenographic service. In a number of instances TVA has transferred to cooperatives distribution lines and other equipment and has financed and constructed rural lines to be paid for over a 20-year period, and in some instances an unlimited period, at 3½% interest, out of the income from the property.

135. The municipalities purchasing power at wholesale from the Authority own and operate their own distribution systems and sell the power which they purchase from the Authority to the ultimate consumers, and the contracts with municipalities not yet purchasing power contemplate the same type of operation.

136. The cooperatives purchasing power at wholesale from the Authority own and operate their own rural distribution systems and sell the power which they purchase from the Authority to the ultimate consumers, and the contracts with cooperatives not yet purchasing power contemplate the same type of operation.

137. All of the Authority's contracts with said municipalities and cooperatives provide for the delivery of power

[fol. 779] at a voltage of from 2,300 volts upwards. Voltages of this magnitude are not suitable for delivery to the ultimate consumer, except for a few industrial consumers, and the municipality or cooperative which serves these consumers directly steps down this voltage one or more times after receiving it from the Authority at the point of delivery before actual delivery to the customer at the usual customer voltages of 115 and 230 volts.

138. All of the Authority's contracts with municipalities and cooperatives for the sale of power provide an arrangement whereby the Authority performs the function of a wholesaler generating and transmitting the power in bulk lots to the purchasing municipality and cooperative, which in turn sells the power to the ultimate consumers, performing all the functions of the distributor.

139. The contracts with municipalities and cooperatives provide only for the sale of firm power.

140. Municipalities and cooperatives under contract to purchase and purchasing power from the Authority assume responsibility for the power at the point of delivery and sell and distribute the power from that point over their own facilities and with their own operating staffs, without any assistance or direction from the Authority. The only assistance rendered by the Authority has been in time of emergency, and in such case the Authority has been paid its full cost, including its usual overhead.

141. The cooperatives to whom the Authority is under contract to sell power have certificates of incorporation [fol. 780] from the authorized officials of the respective States in which they operate showing them to be organized under special acts of the several States in which they operate. These charters show that the corporations are organized by citizens of the respective localities in which the operations of the corporations shall be conducted who were desirous of procuring electric service, and the charter sets out the form of organization, location of the principal office, terms of membership, purposes, powers, and the names of the board of directors for the first year.

142. These organizations were brought about upon the initiative of the residents of the various communities who were desirous of procuring electric service, without any

solicitation on the part of the Authority or any of its representatives.

143. Upon the request of the citizens of the rural areas in which the respective cooperatives are located, the Authority has given advice and assistance to such cooperatives on problems of organization and has given technical advice on methods of conducting surveys and determining the financial feasibility of proposed operations.

144. The Authority, in advising on the financial feasibility of proposed lines, has not substituted its judgment for that of the respective cooperatives. The cooperatives have made all decisions on line extensions, customers to be served, and all other matters relating to the conduct of their operations.

145. All contracts between the Authority and the several cooperatives relating either to the construction of lines or [fol. 781] to the sale of power have been submitted to and approved by counsel for the respective cooperatives and then considered and finally approved by the board of directors of the respective cooperatives.

146. While the Authority has in a few instances temporarily operated directly the lines of certain cooperatives under agreements with such cooperatives providing for such operation by the Authority, all of such operating agreements had expired by December 15, 1937, and all lines constructed for cooperatives had been transferred to such cooperatives.

147. Upon the transfer of any lines constructed by the Authority for cooperatives or temporarily operated by the Authority for such cooperatives, the Authority has withdrawn completely from any participation in the conduct of the affairs of such cooperatives, except as it has continued to supply power at wholesale and except as to the enforcement of its rights as a contractor of such of the cooperatives whose lines were financed in whole or in part by the Authority.

148. The power contracts with industrial customers provide in some cases for the delivery of power on the low-tension side of a substation to be owned by the Authority, and in other cases on the high-tension side of a substation to be owned by the industrial customer. In the case of the

Electric Metallurgical Company the contract provides that delivery shall be made at the boundary of the Wilson Dam reservation at a high transmission voltage. All the contracts are for sales in bulk lots for use in various industrial processes.

[fol. 782] 149. These industrial contracts provide for the delivery of power at voltages comparable to or higher than the voltages at which delivery is made to municipalities or cooperatives. These delivery voltages range as high as 154,000 volts, which is specified for the delivery to the Aluminum Company of America.

150. Except for the industrial customers located in the ceded area covered by the contract of January 4, all of the industrial customers with whom the Authority is under contract to sell power are large electro-chemical and electro-metallurgical companies. The Electro Metallurgical Company, which is locating a new plant in the ceded area, is also of this type.

151. All of said industrial customers outside the ceded area and the Electro Metallurgical Company constitute new loads in the territory. The loads contracted for have not been previously served by any of the complainant companies. Under the contracts with the Victor Chemical Works, the Monsanto Chemical Company, and the Electro Metallurgical Company (in the ceded area) these companies undertake to construct new plants and purchase power from the Authority for service to these plants. The contract with the Aluminum Company of America shows that that company was about to enlarge its facilities and needed additional power to supplement its own generation.

152. Complainant companies do not maintain excess capacity and facilities for service to loads of such large and unusual size as that of these electro-chemical and electro-metallurgical customers of the Authority, but constructed [fol. 783] facilities for service to these companies as needed.

153. All of said large industrial customers have contracted to purchase large amounts of secondary power as well as firm power.

154. Secondary power is that class of power the delivery of which the seller may interrupt during periods which are variously specified in the contract of sale. All of the indus-

trial customers outside of the ceded area have contracted to purchase large amounts of this secondary power of which the Authority may, under the contracts, suspend delivery for specified periods of time, such as in event of low-water flow. These sales of secondary power materially increase the Authority's sales of energy during the period that such power is available. These sales of secondary power to large industrial customers will increase the load factor of the Authority's operations during these periods when the power is delivered.

155. It is not feasible to sell this secondary power to such large industrial customers through a retailer or an intermediary.

156. These large manufacturing plants and utility companies, such as the Arkansas Power & Light Company, with whom the Authority also has a contract providing for the sale of secondary power, are the type of customers whose operations are adapted to the use of that type of power.

157. The following contracts provide for the sale of both firm and secondary power for the period of years noted:

[fol. 784] (a) Contract between Tennessee Valley Authority and Monsanto Chemical Company, dated May 15, 1936, for 20 years.

(b) Contract between Tennessee Valley Authority and Aluminum Company of America, dated July 17, 1936, as amended by agreement of July 20, 1937, for 10 years.

(c) Contract between Tennessee Valley Authority and Arkansas Power & Light Company, dated June 16, 1937, for 5 years, but continuing in effect until cancelled by either party on 30 months' notice.

(d) Contract between Tennessee Valley Authority and Victor Chemical Works, dated July 2, 1937, for 20 years.

(e) Contract between Tennessee Valley Authority and Aluminum Company of America, dated July 20, 1937, for 20 years, but cancellable by either party at the end of 10 years on 5 years' notice.

(f) Contract between Tennessee Valley Authority and Electro Metallurgical Company, dated August 17, 1937, for 20 years.

158. The maximum amounts of secondary power which the Authority has contracted to sell are as follows:

Monsanto Chemical Company.....	32,500 kw.
Aluminum Company of America (July 17, 1936)	40,000 kw.
Arkansas Power & Light Company....	5,000 to 20,000 kw.
(prior to 6-30-38.....	10,000 kw.
year ending 6-30-39... ..	15,000 kw.
year ending 6-30-40... ..	20,000 kw.
year ending 6-30-41... ..	15,000 kw.
year ending 6-30-42... ..	10,000 kw.
thereafter	5,000 kw.)
Victor Chemical Works.....	16,000 kw.
Aluminum Company of America (July 20, 1937)	30,000 kw.
Electro Metallurgical Company.....	16,000 kw.

159. The periods in which the Authority is obligated to supply such secondary power and the required notices before interrupting and resuming secondary power deliveries are as follows for the respective contracts above mentioned:

[fol. 785]	Contract	Period Authority obligated to supply secondary power	Notice required before interruption of delivery	Notice required before resumption of delivery
	Monsanto Chemical Co. Aluminum Co. of America (July 17, 1936)	300 days annually Not less than 90 days when and if available in judgment of Authority	14 days 15 days	14 days 15 days
	Arkansas P. & L. Co. Prior to 7-1-42	300 days annually	15 days	7 days
	Beginning 7-1-42	75% of the time	5 days	"Reasonable" time
	Victor Chemical Works	9 months annually	14 days	7 days
	Aluminum Co. of America (July 20, 1937)	75% of the time in ten years	21 days	7 days
	Electro Met. Co.	9 months	14 days	7 days

160. All of the Authority's contracts contain a force majeure clause which relieves the Authority of any obligation to supply power when prevented by injunctions, strike, riot, invasion, fire, accident, breakdown, act of God, or any other causes beyond the Authority's control. In addition the force majeure clause in each of the contracts with the 4 large industrial contractors and the Arkansas Power & Light Company, except the force majeure clauses in the contract with the Aluminum Company dated July 17, 1936,

as amended, and in the contract with the Monsanto Chemical Company, relieves the Authority of obligation to supply power when service is interrupted or suspended by reason of floods or backwater caused by floods. The force majeure clauses apply to both firm and secondary power.

161. The Authority's contracts with the Aluminum Company and the Arkansas Power & Light Company provide that if an emergency or breakdown should occur on the system of either contracting party, the other party shall stand by and supply the power needed in the emergency to [fol. 786] the full extent its facilities enable it to do so.

162. All contracts between the Authority and municipalities or cooperatives are for a period of 20 years from the respective dates of execution thereof, except that the contracts with the cities of Florence, Sheffield, and Tuscumbia, Alabama, all of which purchase power at the Wilson Dam reservation, are for a period of 30 years from the respective dates of execution thereof.

163. With the exception of small industrials in the "ceded areas," all power contracts except one contain either the following provision immediately after the recitals:

Now Therefore, subject to the provisions of the Tennessee Valley Authority Act of 1933, as amended, the parties hereto agree as follows:

or an identical provision except that the word "pursuant" is used in the first line above quoted instead of the word "subject."

164. The following provision:

* * * should [the contracting municipality or cooperative] desire to increase its purchases in excess of — kilowatts, Authority shall deliver such excess upon written demand and after reasonable notice, provided that the requirements of Authority and/or the United States reasonably enable it to do so.

is contained in each of the contracts specified below, with the number after the name of each purchaser indicating the number of kw. entered in the blank in the clause above.

Municipality or cooperative	kw.
North Georgia Electric Membership Corporation...	300
Pickwick Electric Membership Corporation.....	300
Pontotoc County Electric Membership Corporation..	1,000
Joe Wheeler Electric Membership Corporation.....	1,000
Gibson County Electric Membership Corporation...	300
[fol. 787]	
Duck River Electric Membership Corporation.....	300
Cullman County Electric Membership Corporation..	300
Middle Tennessee Electric Membership Corporation	300
City of Jackson, Tennessee.....	480
City of Tuscumbia, Alabama.....	3,000
City of Trenton, Tennessee.....	1,500
City of Sheffield, Alabama.....	4,500
City of Florence, Alabama.....	7,500
Northeast Mississippi Electric Membership Corpo- ration	750
Tippah County Electric Membership Corporation...	750
City of Amory, Mississippi.....	6,000
City of Middlesboro, Kentucky.....	3,000
City of Knoxville, Tennessee.....	35,000
City of Guntersville, Alabama.....	3,000

The maximum amount of power each industrial or utility customer may purchase from the Authority is definitely specified in the contract with such customer.

165. The Authority has contracts with municipalities now purchasing power calling for the availability of 38,380 kw.

166. The Authority has contracts with municipalities not yet purchasing power calling for the availability of 135,000 kw.

167. The Authority has contracts with rural cooperatives now purchasing power calling for the availability of 9,300 kw.

168. The Authority has contracts with industrial companies by which it contracts to sell 127,850 kw. of firm power.

169. The Authority has contracts with industrial companies and utilities by which it contracts to sell 139,500 kw. of secondary or interruptible power.

[fol. 788] Power Facilities Used or to be Used in Meeting
These Contracts

170. The transfer of the Muscle Shoals properties from the War Department to the Tennessee Valley Authority after the passage of the Tennessee Valley Authority Act included the Wilson Dam and power plant, with 8 generators having a total installed capacity of 184,000 kw., and the Sheffield steam plant, with an installed capacity of 60,000 kw.; also 7.8 miles of high-voltage transmission lines leading from Wilson Dam to various points on the Government reservation, including Nitrate Plant No. 2.

171. A single generator at Norris Dam, constructed by the Authority, was put in operation on July 28, 1936; a second generator was put in operation on September 30, 1936. Each of these generators are of 50,000-kw. capacity. A single generating unit at the Wheeler project, constructed by the Authority, was put in operation on November 9, 1936; a second unit was put in operation on April 14, 1937. Each of these units is of 32,000-kw. capacity.

172. The failure to generate and sell power available at the Wilson, Norris, and Wheeler Dams not needed for governmental uses would result in its complete waste. Substantial amounts of such power have been wasted because of lack of markets in every year since the construction of Wilson Dam.

173. Pursuant to the contract of January 4, with the complainants Alabama Power Company and Mississippi Power Company the Tennessee Valley Authority purchased certain transmission lines extending from Wilson Dam to the [fol. 789] nearby area in northwest Alabama and northeast Mississippi. The lines, which included auxiliary electrical properties, such as substations and rural lines in the area, were located in 10 counties in Mississippi and 6 counties in Alabama. These 16 counties are hereinafter referred to as the "ceded area" covered by the contract of January 4. At the time of the transfer of the properties there were approximately 14,200 electric customers in the ceded area. These customers and all additional customers in the area are now being served by municipalities, cooperatives, and the Alabama Power Company, to whom the Authority sells and delivers power at wholesale for resale in the area, except for a few industrial customers and the rural customers,

relatively small in number, in the vicinity of Wilson Dam, being served by the Authority.

174. The properties in Alabama purchased from the Alabama Power Company, a complainant in this case, included 128 miles of high-voltage transmission lines, 24 substations located along these lines, and 203 miles of rural lines. All of the municipal distribution systems belonging to the Alabama Power Company in these 6 counties, some 12 in number, were served from these transmission lines. They were retained by the Alabama Power Company. Approximately 1,000 rural customers were served from the rural lines at the time of transfer. The industrial customers being served from these properties at the time of transfer were 48 in number, with a load of approximately 5,000 kw.

175. The properties located in Mississippi were purchased from the Mississippi Power Company, a complainant in this case, and consisted of 87.3 miles of high-voltage transmission lines, 7 substations, and 167 miles of rural [fol. 790] lines. Certain municipal distribution systems and steam and oil generating plants were included in the purchase from the Mississippi Power Company. Subsequent to the conveyance of the municipal distribution systems to the Authority in May 1934, these distribution systems were sold to municipalities or cooperative organizations of citizens and farmers formed under the laws of Mississippi.

176. All of the properties purchased from the Mississippi Power Company were actually transferred to the Authority on approximately June 1, 1934. All of the properties purchased from the Alabama Power Company were transferred to the Authority in May 1936.

177. The only transmission lines, other than those purchased or constructed by the Tennessee Valley Authority, connected with any dam of the Authority are owned by the Alabama Power Company, The Tennessee Electric Power Company, and the Southern Tennessee Power Company, all subsidiaries of the Commonwealth & Southern Corporation. Subsidiaries of the Commonwealth & Southern Corporation and companies affiliated with the Electric Bond & Share Company own substantially all of the transmission lines and serve substantially all of the existing load centers in the area within a radius of 100 miles from each of the dams now under construction or completed.

178. Unless the Authority built transmission lines leading from Wilson Dam and the dams it has constructed or has under construction, it could sell power only to utility companies, except for industrial customers that might locate at the dams and such municipalities and cooperatives as are located in the immediate neighborhood of the projects. Such sales to customers other than utility companies would be very limited.

[fol. 791] 179. The Authority has constructed 407.6 miles of high-voltage transmission lines interconnecting the power plants at Wilson Dam and the other dams constructed or under construction.

180. Such plant tie lines can be used to transfer power from one project to another and increase the availability and amount of power at Wilson Dam and on the resulting hydroelectric system.

181. The most economical use of the Authority's dams for power supply requires interconnecting transmission lines similar to those constructed, under construction, or authorized for construction by the Authority.

182. Unless these lines had been constructed, the Authority would have been forced to rely for the interconnection of its various projects upon lines belonging to companies in the Commonwealth and Southern system, more particularly the lines of the Alabama Power Company and The Tennessee Electric Power Company. These existing lines of the complainant power companies were inadequate to perform these functions, and there was no existing line connecting Wilson Dam with Pickwick Landing Dam.

183. In addition to the plant tie lines and the 216 miles of high-tension lines purchased under the contract of January 4, the Authority has constructed 611.6 miles of transmission lines of a voltage of 22 kw. or over; it was constructing on October 15, 1937, an additional 79.1 miles of such lines; and on that date it had authorized for construction an additional 176.9 miles of such lines.

184. These miles of high-voltage transmission lines constructed, under construction, and authorized by the Authority [fol. 792] ity do not constitute duplication of existing transmission facilities in the area, but are useful and valuable additions to those facilities.

185. In addition to the 31 substations purchased under the contract of January 4 from the complainants, the Authority is constructing, has constructed, or has authorized the construction of some 33 substations along or at the end of the transmission lines it has purchased or constructed, and has constructed or is constructing five additional substations at the dams. The substations at the dams are used in stepping up the current generated to higher voltages for transmission, and those along the lines are used in stepping the voltages down for delivery to the Authority's wholesale customers.

186. The transmission lines substantially as constructed by the Authority are essential for service to the customers of the Authority now being served or under contract. Such lines were constructed for service to the customers under contract and not for any strategic purpose of injuring or threatening the complainants.

187. As of October 15, 1937, the Authority owned approximately 421 miles of rural lines in the vicinity of Wilson Dam or Norris Dam. It also owned 107 miles of such lines in Lincoln County, which on December 11, 1937, it contracted to sell and transferred to the Lincoln County Electric Membership Corporation. Of the 421 miles still retained, 353 miles were constructed by the Authority, and of the 353 miles so constructed, 254 miles were located within the so-called ceded area in Alabama. The remaining 68 miles owned by the Authority were either purchased from the complainant Alabama Power Company under the contract of January 4 or were purchased from the complainant The Tennessee Electric Power Company.

[fol. 793] 188. In addition to the rural lines which the Authority has purchased or constructed and still retains, it has constructed 1,023 additional miles of such lines and sold them to municipalities or rural cooperatives with whom it was under contract to sell electric energy at wholesale; it constructed an additional 1,343 miles of such lines under construction contracts with municipalities or cooperatives having power-purchase contracts.

189. The rural lines constructed by the Authority and sold to the cooperatives were constructed with the Author-

ity's own funds and sold to the respective cooperatives at the actual cost of such lines to the Authority plus its regular overhead charges, under an agreement secured by mortgage or other instrument of security for the repayment to the Authority of the indebtedness out of the proceeds of the electric business of the cooperative.

190. The remaining rural lines constructed by the Authority for the cooperatives were constructed by the Authority under construction contracts between the Authority and cooperatives, under the terms of which the Authority has been repaid its actual construction cost, including the usual overhead.

191. Some of the respective cooperatives and municipalities purchasing power from the Authority have constructed many miles of rural line either by contract with an independent contractor or with their own crews, without any aid or assistance, financial or otherwise, from the Authority or any other federal agency.

192. The high-tension transmission lines constructed by the Authority are similar in character and function to the [fol. 794] lines purchased by the Authority under the contract of January 4. The substations constructed by the Authority are similar in character and function to the substations purchased by the Authority under the contract of January 4. The rural lines constructed by the Authority and retained in ownership or sold are similar in function and character to the rural lines acquired by the Authority under the contract of January 4.

193. The Authority does not own or operate any municipal or urban distribution systems.

194. As of October 15, 1937, the total number of rural lines distributing TVA power, exclusive of those of the North Georgia Membership Corporation, was 3,086.7, and approximately 490 miles of additional lines were then under construction. Of such total mileage TVA owned and operated 629.7 miles. Of the total distribution lines distributing TVA power only 292 miles were constructed by municipalities or cooperatives. One thousand and twenty-three miles were constructed and financed by TVA, and 1,343 miles were constructed by TVA under contracts with municipalities or cooperatives, 1,593 miles having been constructed by TVA during its 1937 fiscal year.

195. Expenditures by TVA for distribution facilities up to June 30, 1936, amounted to \$1,809,114. This amount was increased to \$2,447,956 by June 30, 1937, and TVA proposes to expend an additional sum of \$272,000 for distribution facilities during the fiscal year of 1938.

[fol. 795] Power Sales, Present and Potential

196. During the period from May 18, 1933, to January, 1934, and of the contract of January 4, approximately 75% of the electricity sold by the Authority was sold to complainant power companies, subsidiaries of the Commonwealth & Southern Corporation, including the complainant Alabama Power Company, complainant Mississippi Power Company, complainant The Tennessee Electric Power Company, and noncomplainant Georgia Power Company. The total of the power so disposed of to these utility companies since the passage of the Tennessee Valley Authority Act has amounted to 1,216,451,142 kwh. The systems of all of the Commonwealth and Southern companies are interconnected into a single integrated system, and power delivered to one of these companies is merged in the common pool and becomes a joint source of supply.

197. The power sold in the year 1937 was obtained exclusively from the hydroelectric generating facilities of the Authority, either directly or through interchange arrangements with the Commonwealth and Southern companies and the Aluminum Company of America. The steam plant at Muscle Shoals is not in operation.

198. In the calendar year 1937 the Tennessee Valley Authority sold substantial quantities of power to 17 municipalities owning and operating their own municipal distribution systems, 15 rural cooperatives owning and operating their own rural lines, 8 industrial customers, and 2 private utility companies. In addition the Authority sold substantial quantities of power to the Commonwealth and Southern companies in January and February under an extension of the contract of January 4.

[fol. 796] 199. In addition to these sales under outstanding power contracts the Authority sold electric energy to residents on 6 Government reservations and to rural residents residing in the vicinity of Wilson and Norris Dams and Lincoln County, Tennessee. On December 11, 1937, the Au-

thority contracted to sell the rural lines in Lincoln County, Tennessee, and the Lincoln County Electric Membership Corporation contracted to buy said lines, and since that date these lines have been operated by the Lincoln County Corporation.

200. As of October 31, 1937, the total of all residents served by the Authority on Government reservations and in the surrounding areas, exclusive of Lincoln County, was 3,228. All of the Authority's remaining sales of electricity for public use were made at wholesale to municipalities and rural cooperatives. The number of ultimate consumers so served as of October 31, 1937, by said municipalities and cooperatives was approximately 31,900.

201. The direct sales to temporary rural customers and employees on Government reservations have been less than 4% of the total kw. sales each year of the Authority's operations.

202. In addition to these sales in 1937, power generated by the Authority has been used in the construction of Chickamauga, Guntersville, Hiwassee, Norris, Pickwick, and Wheeler Dams, for service to the fertilizer works at Muscle Shoals, and for the operation of the navigation locks at the Authority's dams on the main stream of the Tennessee River.

203. As of December 15, 1937, of the total number of 13 municipalities receiving wholesale service from the Authority [fol. 797] ity, only 6 previously received service of any kind from any of the complainant companies. Of these, 5 were located in the ceded area covered by the contract of January 4, 1934. The residents of the city of Jackson, Tennessee, outside the ceded area, were served directly by the complainant West Tennessee Power & Light Company, and some of them have stopped taking service from the complainant company and are buying from the city.

204. All of the municipalities purchasing power from the Authority in 1937 owned and operated their own municipal distribution systems for a long time before the passage of the Tennessee Valley Authority Act, with the exception of Florence, Sheffield, and Tuscumbia, Alabama, and the city of Jackson, Tennessee. The cities of Florence, Sheffield, and Tuscumbia, Alabama, are located in the ceded area

covered by the contract of January 4, and their boundaries adjoin the Wilson Dam reservation. The residents of these municipalities were previously served by the Alabama Power Company, which was operating distribution systems in these cities without franchises long before the Authority contracted with the municipalities.

205. Except for the cities of Athens, Alabama; Dayton, Tennessee; and Tupelo, Mississippi, all of the municipalities purchasing power at wholesale in 1937 which owned and operated their own distribution systems prior to purchasing from the Authority also owned a generating plant which was used to supply power for such systems. The cities of Athens, Alabama, and Tupelo, Mississippi, both located in the ceded area covered by the contract of January 4, purchased their power at wholesale from the Alabama Power Company and the Mississippi Power Company, respectively, while Dayton, Tennessee, purchased its power supply from a local lumber mill.

206. Only 2 customers of the total number of 16,108 customers receiving service as of October 31, 1937, from the 15 cooperatives purchasing power at wholesale from the Authority over all the rural lines they operated, whether constructed by them or by the Authority for them, ever received electric service of any kind from any of the complainant companies, except for customers located in the ceded area and served by means of lines sold to the Authority under the contract of January 4 and resold by the Authority to the cooperatives.

207. Except for rural customers located in the ceded area on lines purchased from the complainant power companies, none of the rural customers served by the Authority or by municipalities purchasing power at wholesale from the Authority ever received service from any of the complainant companies.

208. None of the industrial loads which the Authority served in 1937 were previously served by any of the complainant companies except the industrial customers in the ceded area in Alabama, whose contracts were assigned to the Authority under the contract of January 4.

209. In addition to the customers served by the Authority as of December 15, 1937, the Authority was as of that

date under contract to serve 8 municipalities, 3 rural co-operatives, 2 industrial customers, and the War Department's requirements for the construction of Sardis Dam.

210. Of the municipalities under contract but not yet purchasing as of December 15, 1937, 2 are located in the ceded area in Alabama, 1 is not served by any of the com-[fol. 799] plainants (Middlesboro, Kentucky, served by Kentucky Utilities Company) and 5, including Chattanooga, Tennessee; Knoxville, Tennessee; Memphis, Tennessee; Guntersville, Alabama; and Paris, Tennessee, are now served by the complainants The Tennessee Electric Power Company, Tennessee Public Service Company, Memphis Power & Light Company, Alabama Power Company, and Kentucky-Tennessee Light & Power Company, respectively; that is, these companies presently own and operate urban distribution systems in the 5 municipalities. The Authority is under contract to sell power at wholesale to these municipalities as soon as they acquire distribution systems. If the municipalities construct new distribution systems and sell power and the complainants continue to operate their existing distribution systems in these municipalities, it is reasonable to believe that a large number of customers of complainants will elect to buy from the municipalities.

211. Of the 3 cooperatives under contract but not yet purchasing power as of December 15, 1937, one is located within the ceded area in Mississippi. None of the 3 had previously purchased power from any of the complainants.

212. Of the 2 industrial customers under contract but not yet purchasing power as of December 15, 1937, one is located in the ceded area in Alabama. Neither of the 2 was previously served by any of the complainants.

[fol. 800] Reasonableness of Conduct of Authority in Disposition of Surplus Power

213. Under the contract of January 4, as amended and supplemented, the Commonwealth & Southern Corporation, as agent for its subsidiaries Alabama Power Company, The Tennessee Electric Power Company, Mississippi Power Company, and Georgia Power Company, purchased from the Authority power in the aggregate value of \$1,814,918.04. In addition there to the Alabama Power Company had purchased from the Authority prior to January 4, 1934,

power in the aggregate value of \$479,573.67. The amounts of power delivered by the Authority to the Alabama Power Company and The Tennessee Electric Power Company (for the subsidiaries of the Commonwealth & Southern Corporation above mentioned), from January 4, 1934, to January 1, 1935, and for the calendar years 1935 and 1936, were as follows:

Alabama Power Company	1934	110,127,068 kwh.
	1935	164,127,787 kwh.
	1936	344,308,127 kwh.
The Tennessee Electric Power Co. . .	1934	39,514,200 kwh.
	1935	76,022,503 kwh.
	1936	212,313,103 kwh.

214. In addition to the sales of power under the contract of January 4, the Authority is currently selling power to 2 utility companies under recent contracts and has practiced no discrimination against complainant utility companies or other utility companies in the sale of power.

215. The so-called power policy of the Authority, dated August 15, 1933, consisting of a joint press release, was [fol. 801] never formally approved by the Board of Directors of the Authority nor ever put into action or followed.

216. The Authority has sold substantial blocks of power to many municipalities which formerly operated their own municipal generating plants, which sales did not involve any displacement of any existing load of the complainant companies. The Authority has sold substantial blocks of power to cooperatives for distribution by them in rural areas to rural customers heretofore unserved, which sales did not involve any displacement of any existing load of complainant power companies. The Authority has sold substantial blocks of power to industrial concerns who located new plants or enlarged existing plants, which sales did not displace any existing load of complainant power companies. The Authority has sold substantial blocks of power to complainant and non-complainant companies with existing utility networks. In fact, none of the sales of power by the Authority have directly displaced any existing load of complainant companies except in the ceded area covered by the contract of January 4, in which the Authority purchased, for valuable considerations, the existing

facilities from the complainants Alabama Power Company and Mississippi Power Company. None of the Authority's sales of power to date have indirectly displaced any existing load of the complainants outside the ceded area, except that the complainant West Tennessee Power & Light Company has lost some customers to the city of Jackson and has lost a load of approximately 50 kw. in the town of Gibson which it sold to the Gibson Power & Light Company; this latter load was lost to the complainant West Tennessee Power & Light Company when the properties in the town [fol. 802] of Gibson were sold at auction by the Gibson Power & Light Company to the Gibson County Electric Membership Corporation.

217. The officials of the Authority have taken the position in correspondence with municipal officials that the question of whether a municipality shall own and operate its own distribution system is one for the sole determination of the municipality.

218. The Authority does not aid or assist in conducting surveys to determine the economic feasibility of proposed municipal-plant operations by municipalities applying for the purchase of power from the Authority.

219. The standard of the Authority in entering into power contracts with municipalities is the financial feasibility of extending wholesale service to such municipalities as apply for wholesale service.

220. The Authority has not confined its power disposition to those municipalities which previously did not own and operate their own municipal distribution systems. On the other hand, the Authority has throughout the course of its existence entered into a large number of contracts with municipalities who owned and operated municipal distribution systems before the passage of the Tennessee Valley Authority Act. The power contracts between the Authority and municipalities are substantially uniform, and there are no special provisions favoring municipalities who had not previously owned and operated their distribution systems or discriminating against municipalities that did own and operate their municipal distribution systems before the passage of the Tennessee Valley Authority Act.

[fol. 803] 221. The contracts for the disposition of power between the Authority and municipalities and cooperatives

contain provisions in which the parties agree that certain schedules of rates shall be charged by the wholesale purchaser to persons to whom it resells. These provisions for agreed resale rates are contained in all contracts regardless of whether or not the complainant utility companies own and operate distribution systems in the municipality or area where the purchased power is to be resold.

222. The Authority has made no effort to regulate the rates of its municipal or cooperative customers and has taken no action regarding such rates other than entering into the initial agreement establishing resale rates.

223. There have been uniform and progressive increases of a substantial character in the amount of wholesale purchases of power made by each municipality which has purchased power from the Authority.

224. There has been a uniform and progressive increase in the number of ultimate consumers served by each municipality and cooperative that has purchased power at wholesale from the Authority.

225. The amount of power purchased by each of the municipal customers of the Authority in October 1937 was on the average about 100% in excess of the respective amounts purchased by the respective municipalities in the initial month of wholesale service by the Tennessee Valley Authority. This percentage of increase is in excess of the highest percentage of increase of any of the complainant companies in power sold to regular customers from 1933 to 1936. It is greatly in excess of the approximately 20% of increase in the national production of electricity for the [fol. 804] same period of years.

226. The annual average consumption of residential customers of municipalities and cooperatives purchasing power from the Authority generally exceeded the average for the same class of customers of the complainant companies.

227. The Authority has not induced the breach of any power contract between any complainant and any of its customers.

228. In marketing the power generated at its dams the Authority has not engaged in any solicitation of customers, coercion, duress, fraud, or misrepresentation in procuring

contracts with municipalities, cooperatives, or other purchasers of power.

229. In marketing the power generated at its dams the Authority has not acted with any malicious or malevolent motive and has not conspired with municipalities or other prospective purchasers of power.

Extent of Displacement of Existing Utilities Threatened

230. The defendant Authority has no plans and has made no investigations of any substantial character for the construction of any dams in the Tennessee Valley except the 7 high dams on the main stream and Norris and Hiwassee Dams on the tributaries. Other than these projects it has recommended only the construction of the Fontana Dam on the Little Tennessee River. The surveys of the Tennessee River basin and its tributaries conducted by the Corps of Engineers of the United States Army for the War [fol. 805] Department and reported in House Document No. 328, Seventy-first Congress, second session, concerned combined public and private projects; the 149 projects so surveyed have not been recommended for construction by the Federal Government.

231. It is reasonably estimated that the plants within ready transmission distance of the Authority's run-of-river plants, constructed or under construction, will require 310,000 kw. of additional capacity in 1939 and 787,500 kw. of additional capacity in 1943. Of this amount the requirements of the Commonwealth and Southern companies which are complainants herein, plus the requirements of the non-complainants Georgia Power Company, Gulf Power Company, and South Carolina Power Company, affiliated and interconnected non-complainant companies, are 207,000 kw. in 1939 and 559,000 kw. in 1943; and the requirements of the Electric Bond and Share companies who are complainants herein and affiliated non-complainant companies are 88,200 kw. in 1939 and 190,000 kw. in 1943. The estimated energy requirements for the companies within ready transmission distance of the Authority's run-of-river dams, constructed or under construction, will be over 770,000,000 kwh. in 1939 and over 2,150,000,000 kwh. in 1943. Of these amounts the additional requirements of the Commonwealth and Southern complainant companies and the Georgia Power Company will be over 550,000,000

kwh. in 1939 and 1,600,000,000 kwh. in 1943. The additional energy requirements of the Electric Bond & Share Company and affiliated companies with which they are interconnected will be over 200,000,000 kwh. in 1939 and over 560,000,000 kwh. in 1943.

232. Some of the complainants have added substantially to their generating capacity since 1933. Some of the com-[fol. 806] plainants are preparing for the construction of additional generating plants of a substantial capacity. The Tennessee Electric Power Company is preparing to construct a steam plant at Nashville with a generating capacity of approximately 25,000 kw. The Appalachian Electric Power Company is constructing a hydroelectric project on the New River in Virginia with a planned installed capacity of about 75,000 kw. and has leased 55,500 kw. of power from the Federal Government at navigation projects on the Kanawha River. The Arkansas Power & Light Company has contracted to purchase 40,000 kw. from the Authority in the near future.

233. There is a steadily increasing demand for electric energy in the area within transmission distance of the Authority's projects constructed, under construction, and investigated for construction.

234. There are unserved potential markets for the electric energy which may be generated at the projects of the Authority, not involving any displacement of the existing loads of complainant companies, including new industries and unserved rural areas. The percentage of rural electrification in the States which make up the Tennessee River basin is small. In 1933 it ranged from 0.8% in Mississippi to 7.9% in Virginia. In 1936 it ranged from 2% in Mississippi to 10.3% in Virginia.

235. There are many unserved rural areas. A great majority of the so-called rural customers on lines of complainants existing in the counties or areas where the lines of the cooperatives have been constructed were in towns of a population of 100 or more, or within 6 miles of a transmission substation. There was little area-wide rural electrification. [fol. 807] The fact that the lines of the cooperatives extend out from load centers or communities produces less customer density to the mile.

236. The growth in demand in terms of the firm peak load of the principal companies operating in territory located within a radius of 250 miles of the dams recommended in the TVA unified plan from 1929 to 1936 was approximately 22%, that is, from 2,992,000 kw. in 1929 to 3,652,000 kw. in 1936. It is reasonably estimated by experts from both sides that this firm peak load will increase at least an additional 772,000 kw. or 21%, by 1939.

237. By the date the power generating units authorized for the dams of the Authority are installed it is reasonably estimated by witnesses for both sides that the power demand in the area within transmission distance of the projects of the Authority will be greatly in excess of the present peak-load ability of the existing generating plants in the area. Unless additional generating capacity is provided by private utilities or at the projects of the Authority, there is likely to be a substantial power shortage.

238. Without subtracting the substantial amounts of power which the Authority has contracted to sell to large industrial customers, the Arkansas Power & Light Company, and municipalities not yet served, the amount of power which will be available at the projects of the Authority with authorized installations of generating capacity is less than the amounts of power necessary to meet the increases in demand in the area served by private utilities within transmission distance predicted for the date when these installations are scheduled for completion.

[fol. 808] 239. For most of the complainants 1936 represented a new high point in volume of power sales, the increases from 1930 to that year ranging up to more than 50%. Since 1933 sales to regular customers have increased even more rapidly, the rates of growth during the latter period ranging up to approximately 75%.

240. The number of electric customers served has shown a substantial increase for each of the respective complainants, the present number of customers served in 1937 constituting a new high for the said respective complainants.

241. Both the gross and the net revenues of the respective complainants in their electric-utility operations have increased substantially in the period since the creation of the Tennessee Valley Authority.

242. In many cases the gross revenues have reached a new high for the respective companies.

243. From 1933 to the middle of 1937 the rate of growth in the consumption of electricity in the 7 States, parts of which compose the Tennessee Valley basin, has been in excess of the national rate. The increase in average annual residential use of customers of many utilities operating in the area from 1933 to 1937 greatly exceeds the increase in national average annual residential use.

244. The generating and transmission facilities of the complainants Alabama Power Company, Mississippi Power Company, The Tennessee Electric Power Company, and non-complainants Georgia Power Company, Gulf Power Company, and South Carolina Power Company are interconnected and are operated as an integrated power pool. Any point on the system of any of said companies may be [fol. 809] served with power generated at any other point in said power pool.

245. The facilities of complainants West Tennessee Power & Light Company, Memphis Power & Light Company, and Mississippi Power & Light Company, and non-complainants Louisiana Power & Light Company and Arkansas Power & Light Company, both members of the Electric Bond & Share Company system, are interconnected and operated as a common integrated transmission and generating pool.

246. The entire power requirements of the complainant Tennessee Public Service Company are purchased from complainant Carolina Power & Light Company. The Carolina Power & Light Company is interconnected with the Appalachian Electric Power Company and the Duke Power Company.

247. The generating and transmission facilities of the Appalachian Electric Power Company, Kingsport Utilities, Inc., and Kentucky & West Virginia Power Company, Inc., are interconnected and operated as an integrated transmission and generating-plant system.

248. The generating and transmission facilities devoted to service to the municipalities now served by the respective complainants and under contract to purchase power from the Authority form parts of integrated transmission and generating systems and may be devoted to serving the

growth in other loads on the system should there be any loss of load in any given municipality which purchases power from the Authority due to loss of customers to said municipality.

249. The unserved rural market in the area adjacent to the lines of the respective complainants which can be economically served by the complainants is negligible in [fol. 810] amount and the injury to the respective complainants from any extension of rural lines for service to this market by the Authority or municipalities or cooperatives purchasing power at wholesale from the Authority would also be negligible.

250. Prior to the completion of generating plants at Norris Dam on July 28, 1936, and Wheeler Dam on November 8, 1936, all power supplied by the Authority to said companies under the contract of January 4, 1934, was supplied from Wilson Dam. Wilson and Norris Dams are and have been interconnected from and after July 28, 1936. Norris Dam began generating power on July 28, 1936, and Wheeler Dam on November 9, 1936. All power purchased by the Alabama Power Company and The Tennessee Electric Power Company from and after the respective dates of completion of Norris and Wheeler Dams was supplied from an interconnected pool, including the power generated at both of said dams from and after the dates of completion.

251. The months of June through December 1936 were months of subnormally low stream flow in the Tennessee River. The purchases of power from the Authority by the Commonwealth and Southern companies in these months were very substantial. During the 7 months these purchases amounted to 552,562,368 kwh., which was slightly more than the total amount of kwh. which could have been generated at Wilson Dam without the benefit of storage releases from Norris Dam. During August, September, and November the purchases by the Commonwealth and Southern companies were substantially greater in proportion to the generating ability of Wilson Dam without benefit of Norris Dam; those purchases ranged from 110% to 137% of the amount of power which could have been generated at Wilson Dam in those months without the benefit of Norris Dam. During this 7-month period the sales to the Commonwealth and Southern companies

were approximately 92% of the amount of power which could be generated at Wilson Dam including the benefit of Norris storage releases, and 83.45% of the total TVA system sales. In August, September, and November the Commonwealth and Southern companies purchased more power than Wilson Dam generated, including the generation resulting from Norris storage releases, the percentages varying from 101.82% in August to 108.51% in September.

[fol. 812]

Conclusions of Law

1. The Tennessee Valley Authority Act is a valid exercise of the constitutional powers of Congress.

2. All of the acts complained of and established by the evidence in this cause are authorized by the terms of the Tennessee Valley Authority Act, and the portions of the statute granting such authority are within the constitutional powers of Congress.

3. Neither the Tennessee Valley Authority nor any of its directors have exceeded the powers conferred upon them by the Tennessee Valley Authority Act.

4. The Tennessee River from its mouth at or near Paducah, Kentucky, to a point above Knoxville, Tennessee, is in law a navigable interstate waterway of the United States.

5. Under the power to regulate and promote interstate commerce conferred by subsection 3 of section 8 of article one of the Constitution of the United States, the Federal Government has the power to improve the navigable character of the Tennessee River by means of the construction of dams and reservoirs upon the main stream of the Tennessee and its tributaries. The selection or determination of the particular types of dams to be constructed for this purpose is a matter to be determined by Congress or its authorized agents.

6. The Federal Government, under the powers delegated to it by the Constitution of the United States, has the power to construct dams and reservoirs upon navigable rivers [fol. 813] of the United States and upon tributaries of such navigable rivers for the purpose of controlling floodwaters on such rivers. The selection or determination of the particular types of dams to be constructed for this purpose is

a matter to be determined by Congress or its authorized agents.

7. Under the powers delegated to it by the Constitution of the United States, the Federal Government has the power to construct dams and reservoirs for the purpose of protecting interstate commerce, both upon the navigable waterways and upon the highways and railroads, from interruption and interference due to destructive floods.

8. Under the powers delegated to it by the Constitution of the United States, Congress has the power to construct dams and reservoirs for the purpose of protecting the instrumentalities of interstate commerce, including navigable waterways, railroads, highways, and manufacturing establishments engaged in the production of goods moving in interstate commerce, from the hazards and interruptions resulting from destructive floods.

9. Under the powers delegated to it by the Constitution of the United States, the Federal Government has the power to construct dams and reservoirs upon the Tennessee River and its tributaries for the purpose of controlling destructive floods in the Tennessee and Mississippi River Valleys.

10. Under the power to regulate and promote interstate commerce, the Federal Government has the constitutional power to construct all dams in the Tennessee River and its tributaries that are reasonably related to the improvement of the navigable character of the Tennessee River or any of its navigable tributaries.

[fol. 814] 11. Under the powers delegated to it by the Constitution of the United States, Congress has the power to authorize the construction of all dams upon the Tennessee River and its tributaries that will in fact contribute to the control of destructive floods in the Tennessee and Mississippi River Valleys.

12. Under the power to regulate and promote commerce between the several States, Congress has the constitutional power to authorize the construction of each of the dams constructed, under construction, or under investigation for construction by the Tennessee Valley Authority upon the main stream of the Tennessee River and its tributaries.

13. By the terms of the Tennessee Valley Authority Act, Congress has created the Tennessee Valley Authority as an agency of the Federal Government and has expressly authorized this agency to construct each of the dams constructed, under construction, or under investigation for construction on the main stream of the Tennessee River and its tributaries. Congress has from time to time authorized the construction of each individual dam constructed or under construction by appropriate appropriation statutes.

14. The water power created as a result of the construction of the dams authorized by the Tennessee Valley Authority Act is the property of the United States.

15. Congress has the constitutional power to authorize the installation and operation of such generating facilities at the dams authorized by the Tennessee Valley Authority Act as may be necessary to generate electric energy from the water power created by the construction of such dams.

[fol. 815] 16. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to make provision in the dams constructed by it upon the Tennessee River and its tributaries for the necessary facilities for generating electric energy. The statute specifically authorizes the installation and operation of powerhouses, generators, and other facilities.

17. The electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act is the property of the United States and may be disposed of by Congress or its authorized agency under subsection 2, section 3, article 4 of the Constitution of the United States.

18. The electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act is lawfully and legally acquired property of the United States resulting from the exercise of its constitutional powers and may be used or disposed of in any manner which the Congress, in the exercise of its discretion, may select as the reasonable means of such disposition.

19. The Tennessee Valley Authority Act directs the Tennessee Valley Authority to operate all of the dams constructed by it primarily in the interests of navigation and

flood control, but expressly authorizes the said Tennessee Valley Authority to generate electric energy at said dams insofar as this can be done consistently with the interests of navigation and flood control.

20. The method of operation of the dams and reservoirs constructed and under construction which the defendants [fol. 816] have followed and propose to follow in the future is authorized by the Tennessee Valley Authority Act.

21. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the construction of transmission lines from the dams authorized by the Tennessee Valley Authority Act in order to dispose of the electric energy generated at such dams.

22. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the Tennessee Valley Authority to generate electric energy at all dams authorized by the Tennessee Valley Authority Act; to construct or acquire transmission lines leading from such dams to municipalities, cooperative associations of citizens and farmers not organized for profit, large industrial customers, and other purchasers of power.

23. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to construct or acquire transmission lines leading from each of the dams constructed under the authority of the Tennessee Valley Authority Act to the surrounding market area.

24. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to sell electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act to wholesale customers under long-term contracts.

[fol. 817] 25. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to sell electric energy generated at any of the dams authorized by the Tennessee Valley Authority Act direct to rural customers and inhabitants of small towns and villages, and to industrial customers.

26. Under the power to dispose of property of the United States, Congress has the power to authorize the Tennessee Valley Authority to own and operate transmission lines

and rural distribution lines for the purpose of transmitting and selling the electric energy generated at said dams.

27. Under the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to enter into contracts with municipalities, cooperative associations of citizens and farmers not organized for profit, and industrial customers for the sale of electric energy generated at the dams constructed by the Tennessee Valley Authority under said act.

28. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to sell electric energy generated at any of the dams constructed under the terms of said act direct to rural customers and inhabitants of small towns and villages.

29. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to own and operate transmission and rural distribution lines for the purpose of transmitting and selling the electric energy generated at any of the dams constructed under the [fol. 818] authority of said act.

30. By the terms of the Tennessee Valley Authority Act, Congress has directed the Tennessee Valley Authority to give preference in the sale of power to States, counties, municipalities and cooperative organizations of citizens or farmers not organized for profit. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

31. The Tennessee Valley Authority Act authorizes the Authority to construct rural transmission lines for service to farmers or cooperative organizations of citizens or farmers and to sell such lines to municipalities or such cooperative organizations. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

32. The Tennessee Valley Authority Act authorizes the Authority to sell power direct to industrial customers in order to increase the load factor on the system. This provision is a valid exercise of the power of Congress to dispose of property of the United States.

▲ 33. The Tennessee Valley Authority Act authorizes the Board of Directors of the Authority to fix the rates at which the electric energy generated at the dams authorized by the Tennessee Valley Authority Act may be sold. The statute vests discretion in the board in fixing such rates, and the exercise of this discretion is not subject to judicial review. This provision of the statute is a valid exercise of the power of Congress to dispose of property of the United States.

[fol. 819] 34. Under the constitutional power to dispose of property of the United States, the Government may attach to the sale of its property such conditions as it may deem reasonable to insure the widespread diffusion of the benefits of such property and the avoidance of monopolistic control of such property.

35. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the Tennessee Valley Authority to include in any contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions with respect to the rates at which such power is to be resold to the ultimate consumers.

36. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Authority to include in any contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions with respect to the rates at which such energy is to be resold to the ultimate consumers.

37. Under the power to dispose of property of the United States, Congress has the constitutional power to authorize the Tennessee Valley Authority to include in all contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions relating to the bookkeeping and accounting methods to be followed by the purchasers of such power.

38. By the terms of the Tennessee Valley Authority Act, Congress has authorized the Tennessee Valley Authority to include in all contracts for the sale of power generated at any of the dams authorized by the Tennessee Valley Authority Act provisions relating to the bookkeeping and accounting [fol. 820] methods to be followed by the purchasers of such power.

39. The Tennessee Valley Authority Act does not contain any provisions regulating or attempting to regulate the rates or operations of complainant companies or other private utilities.

40. Sales of power by the Tennessee Valley Authority in accordance with the provisions of the statute at rates fixed and determined by the board of directors do not constitute regulation of the rates or businesses of the complainant companies or other private utilities.

41. The municipalities and cooperatives purchasing power at wholesale from the Authority are subject to regulation by the States.

42. The municipalities and cooperatives purchasing power at wholesale from the Authority are authorized under the statutes of the several States in which they are located to purchase said power, to contract with the Authority with respect to the same, and to engage in the business of selling the same at retail.

43. All of the municipalities and cooperatives purchasing power at wholesale from the Authority are authorized by the statutes of the several States in which they are located to enter into contracts with the Authority containing provisions agreeing upon the rates at which such power is to be resold and provisions relating to the bookkeeping and accounting methods to be followed by such purchasers. Under the laws of the several States in which the municipalities and cooperatives are located, such provisions do not constitute any unlawful delegation or abdication of sovereign [fol. 821] power by the municipalities or cooperatives.

44. The provisions of the contracts between the Authority and the municipalities and cooperatives purchasing power at wholesale from it relating to the rates at which the power so purchased from the Authority is to be resold and the provisions relating to the methods of keeping accounts do not constitute any invasion of the reserved powers of the States under the tenth amendment to the Constitution of the United States.

45. The provisions in the contracts between the Authority and the municipalities and cooperatives purchasing power at wholesale from it relating to the rates at which such power is to be resold do not in law amount to regulation

either of the rates of said wholesale purchasers or of the rates of private companies competing with such wholesale purchasers.

46. Under the laws of the several States in which the municipalities and cooperatives purchasing power at wholesale from the Authority are located, the rates at which the power purchased from the Authority may be resold by the municipalities and cooperatives remain subject to the police power of the States, if and when the States may elect to exercise such power.

47. The cooperatives purchasing power at wholesale from the Authority are, under the laws of the several States in which they are located, independent corporate entities and not subsidiaries or instrumentalities of the Authority.

[fol. 822] 48. The municipalities purchasing power at wholesale from the Authority are, under the laws of the several States in which they are located, independent public agencies of said States and are not subsidiaries or instrumentalities of the Authority.

49. The municipalities and cooperatives purchasing power at wholesale from the Authority are authorized under the laws of the several States in which they are located to engage in the business of selling and distributing electric energy at retail and have the legal right to compete with the complainant companies in such business. Any damage or injury resulting or threatened to the complainant companies, or any of them, from such competition is *damnum absque injuria* and does not give rise to a cause of action on behalf of said companies.

50. None of the complainant companies have or claim any exclusive franchise or right to engage in the business of selling and distributing electricity in the various municipalities and communities in which they operate.

51. The sale of electric energy by the Tennessee Valley Authority to municipalities and cooperatives lawfully engaged in the business of selling and distributing said energy at retail does not result in any legal injury to any of the complainant companies and does not invade any legal right of any of said companies.

52. The complainant companies have no standing or right to challenge the right of the municipalities and cooperatives

purchasing power at wholesale to engage in the business of selling and distributing electric energy in competition with said companies.

[fol. 823] 53. The complainant companies have no standing or right to challenge the legal right of the Authority to sell electric energy at wholesale to municipalities and cooperatives engaged in the business of reselling said energy at retail in legal competition with the complainant companies.

54. The complainant companies have no standing or right to challenge the validity of the contracts under which the Authority is selling or has agreed to sell electric energy at wholesale to municipalities and cooperatives engaged in the business of reselling said energy at retail in legal competition with the complainant companies.

55. Having failed to prove any damage in fact, actual or threatened, resulting from the sales of power by the Authority direct to rural customers not previously served by any of the complainant companies, said companies have no standing or right to challenge the legal right of the Authority to make such sales.

56. Having failed to prove any damage, actual or threatened, resulting from the sales of power by the Authority direct to industrial customers not previously served by any of the complainant companies, said companies have no standing or right to challenge the legal right of the Authority to make such sales.

57. The complainant companies have no legal right to be free from competition, and they have no legal standing or right to challenge the statutory powers of the Authority to generate, transmit, and sell electric energy in competition with them, or some of them.

[fol. 824] 58. Under the decision of the Supreme Court in the Ashwander case, the right of the Authority to acquire and operate the facilities in Alabama transferred to it under the contract of January 4 is settled and cannot be questioned in this case.

59. Section 7 of the contract of January 4 confers upon the Authority the contractual right to serve municipalities located within the ceded area in Alabama, and the Alabama

Power Company, a party to that contract, has no right to question the legal right of the Authority to engage in such service.

60. Section 7 of the contract of January 4 confers upon the Authority the right to sell power to any municipality owning and operating its own distribution system and not purchasing power from the utilities party to that contract, and the complainants Alabama Power Company, Mississippi Power Company, and The Tennessee Electric Power Company, parties to that contract, have no right to challenge sales to such municipalities by the Authority.

61. Section 7 of the contract of January 4, 1934, confers upon the Authority the right to sell power to any customers not served by the parties to that contract as of January 4, 1934, up to a maximum aggregate demand of 2,500 kw., and the complainants Alabama Power Company, Mississippi Power Company, and The Tennessee Electric Power Company have no right to challenge sales of power to customers served pursuant to the right so conferred.

62. Under the record the complainants have no legal right within the areas served by them respectively to exclude lawful competitors from the power markets of the future.

[fol. 825] GORE, J. (dissenting in part), concurs in the following findings of fact made by the Court:

40	97	129	151	175	201	230	168	17	35	92
44	98	130	152	176	202	231	169	18	36	113
45	99	131	153	177	203	232	1	19	37	114
48	100	135	154	178	204	233	2	20	77	115
49	101	136	155	179	205	234	3	21	78	116
50	102	137	156	180	206	235	4	22	79	117
51	103	138	157	181	207	236	5	23	80	118
57	104	139	158	182	208	239	6	24	81	119
58	105	140	159	183	209	240	7	25	82	120
61	106	141	160	185	210	241	8	26	83	121
64	107	142	161	187	211	242	9	27	84	122
65	108	143	162	188	212	244	10	28	85	123
67	109	144	163	189	215	245	11	29	86	124
72	110	145	164	190	221	246	12	30	87	132
74	111	146	170	191	223	247	13	31	88	133
76	112	147	171	192	224	248	14	32	89	134
94	126	148	172	193	225	165	15	33	90	194
95	127	149	173	199	226	166	16	34	91	195
96	128	150	174	200	227	167				

Findings of fact 126 to 131 and 135 to 147 do not state the full contents of the contracts. The provisions of the contracts are set out in dissenting findings 96 to 101, in-

clusive. Findings of fact 162 to 164 purport to detail a portion of the terms of the contracts, but same are given in full in dissenting findings 95 to 101, inclusive.

GORE, J., believes that the following findings of fact made by the Court should be modified to read as follows:

39. These dams when completed will provide a continuous 9-foot navigable channel over the entire distance from the mouth of the Tennessee at Paducah, Kentucky, to Knoxville, Tennessee, a distance of approximately 650 miles, will substantially alleviate the destructive floods in the Tennessee and Mississippi Valleys, and will also create a substantial amount of water power.

[fol. 826] 42. Each of the projects of the Authority has all elements of design reasonably required for navigation and flood control in accordance with accepted engineering standards. Each of the projects has been designed to provide storage capacity for a slackwater pool behind the dam and a substantial additional storage capacity above the slackwater pool level. Each of the main-stream projects is equipped with a lock prescribed and designed by the Corps of Engineers, with space for an additional parallel lock when commerce warrants. The locks which are being installed are of sufficient size and capacity to accommodate adequately the traffic which may be expected in the reasonably near future. To provide effective means for flood control and stream-flow regulation, each of the projects is equipped with large spillway gates, and in addition, the tributary projects are equipped with sluiceways of large capacity. At each of the projects facilities have been provided, or construction and design are such that facilities may be provided, for the generation of power. Each of the projects of the Authority can be operated to secure substantial benefits in the improvement of navigation and the control of destructive floods and, consistently therewith, the production of electric energy. Norris Dam has no elements of design reasonably required for navigation from the dam to the mouth of the Clinch River, and the flood-control storage in the reservoir is very limited.

[fol. 827] 53. Each of the dams constructed, under construction, or authorized for construction or investigation by the Tennessee Valley Authority will result in a substan-

tial improvement for navigation, except the dams on the tributaries.

54. The Authority's projects will provide superior channel depths and widths and substantially fewer lockages, thus substantially reducing the time consumed in lockages, as compared with the navigation improvement which could be provided by the system of low dams set forth in House Document No. 328.

62. The levees on the lower Mississippi have reached the practical limits of height. For the most effective flood-control use reservoirs should be located close to Cairo, which is at the junction of the Ohio and Mississippi Rivers.

63. The Tennessee River, being the largest tributary of the Ohio and closer to Cairo and the lower Mississippi than any other major tributary of the Ohio system, is one of the best rivers for reservoirs for flood control on the lower Mississippi.

68. The projects of the Authority will permit the maintenance at all times of the 9-foot channel on the main stream of the Tennessee with sufficient overdepths to accommodate boats of 9-foot draft. The tributary projects on the Clinch and Hiwassee Rivers will also permit the maintenance of slackwater pools in the lower portions of the reservoirs, which is necessary on the Clinch, a navigable tributary, in order to preserve existing navigation and to avoid foreclosing future improvement for navigation.

[fol. 828] 69. The tributary projects of the Authority, by reducing flood flows and increasing low flows, will increase the effectiveness of the high dams on the main stream for the reduction of flood heights on the Mississippi and Tennessee Rivers, will substantially increase the navigable depths in the upper ends of the navigation pools created by the main-stream projects, and will substantially increase the navigable depths on the lower Mississippi River, which increases will be of material benefit to navigation.

71. Upon the completion of the construction of the Pickwick Landing project and the Guntersville project, these two projects, in conjunction with the already-completed Wheeler Dam and the previously existing Wilson Dam, will provide a 9-foot channel from Pickwick Landing to the vicinity of Chattanooga, a distance of approximately 257

miles. The completed Norris Dam is being now, but this will not be necessary after the completion of Pickwick and Guntersville Dams, operated to provide a navigation channel of 7-foot minimum depth in the 207-mile stretch between Pickwick Landing and the mouth of the Tennessee River. This 7-foot depth below Pickwick will be increased to 7½ feet upon completion of Hiwassee. These projects together will provide a commercially feasible navigation channel between Chattanooga, Tennessee, and the inland waterway system. For the larger part of each year there will be a through navigation channel of 9-foot depth from Chattanooga to the mouth of the river, and even prior to construction of Gilbertsville, by means of a moderate amount of dredging and releases from other projects of [fol. 829] the Authority, it is feasible to provide a permanent 9-foot channel below Pickwick Dam. Until the Gilbertsville project is constructed, which may not be for many years, it is necessary to store a substantial amount of water in the tributary reservoirs during the high-water season to provide the low-water releases required for this improvement to navigation.

73. Since completion, Norris Dam has been successfully operated to improve substantially the navigation channel of the Tennessee River between Wilson Dam and its mouth and to hold off from the peak of the Mississippi River flood of 1937 approximately 28,000 c.f.s., the Norris Dam storing the entire flow of the Clinch River for six weeks during the 1937 Mississippi flood.

93. The projects of the Tennessee Valley Authority are the only type of dams which will conserve the water resources of the Tennessee River system for navigation, Tennessee and Mississippi flood control, water power, and other beneficial uses; and those available for flood control coincide in many instances with those required for the regulation of the river for other purposes. The construction of low dams on the main stream of the Tennessee River for navigation would waste the resources of the river for any other purpose. It would be physically impossible to provide the high dams on the main stream necessary for the development of flood control and power without the wasteful removal or duplication of such low dams.

[fol. 830] 186. The transmission lines substantially as constructed by the Authority are essential for service to the

customers of the Authority now being served or under contract.

198. In the calendar year 1937 the Tennessee Valley Authority sold substantial quantities of power to 17 municipalities owning and operating their own municipal distribution systems, 15 rural cooperatives owning and operating their own rural lines, and 8 industrial customers.

216. The Authority has sold substantial blocks of power to cooperatives for distribution by them in rural areas to rural customers heretofore unserved, which sales did not involve any displacement of any existing load of complainant power companies. The Authority has sold substantial blocks of power to industrial concerns who located new plants or enlarged existing plants, which sales did not displace any existing load of complainant power companies. The Authority has sold substantial blocks of power to complainant and noncomplainant companies with existing utility networks. In fact, none of the sales of power by the Authority have directly displaced any existing load of complainant companies except in the ceded area covered by the contract of January 4, in which the Authority purchased, for valuable considerations, the existing facilities from the complainants Alabama Power Company and Mississippi Power Company. None of the Authority's sales of power to date have indirectly displaced any existing load of the [fol. 831] complainants outside the ceded area, except that the complainant West Tennessee Power & Light Company has lost some customers to the city of Jackson and has lost a load of approximately 50 kw. in the town of Gibson, which it sold to the Gibson Power & Light Company; this latter load was lost to the complainant West Tennessee Power & Light Company when the properties in the town of Gibson were sold at auction by the Gibson Power & Light Company to the Gibson County Electric Membership Corporation.

237. By the date the power generating units authorized for the dams of the Authority are installed it is reasonably estimated by witnesses for both sides that the power demand in the area within transmission distance of the projects of the Authority will be greatly in excess of the present peak-load ability of the existing generating plants in the area. Unless additional generating capacity is provided by

private utilities or at the projects of the Authority, there is likely to be a substantial power shortage. The proof abundantly shows that complainants have adequate facilities for supplying the needs, have always had adequate facilities, and are prepared in the future to install additional facilities necessary to take care of future needs.

249. The unserved rural market in the area adjacent to the lines of the respective complainants which can be economically served by the complainants is negligible in amount.

250. Prior to the completion of generating plants at Norris Dam on July 28, 1936, and Wheeler Dam on November 8, 1936, all power supplied by the Authority to said companies under the contract of January 4, 1934, was supplied from Wilson Dam. Wilson and Norris Dams are and have been interconnected from and after July 28, 1936. Norris Dam began generating power on July 28, 1936, and Wheeler Dam on November 9, 1936.

GOBE, J., rejects all other findings of fact adopted by the Court.

[fol. 833] GORE, J., is of opinion that in addition to the findings of fact adopted by the Court, the following should also be adopted:

1. The largest hydroelectric plant of the Carolina Power & Light Company is the Waterville plant located in Haywood County, North Carolina, on the Big Pigeon River, which was constructed under authority of a license issued to the company by the Federal Power Company. This plant has an installed capacity of 108,000 kw, which is more than 43% of the company's total generating capacity. The company's application for this Federal Power Commission license stated that this plant would be connected to the transmission system of the company and that the power output generated there would be used in the company's market in the western portion of North Carolina.

2. Four of the 6 hydroelectric generating plants owned and operated by the Alabama Power Company were constructed under authority of acts of Congress. Lock 12 (Lay Dam) was constructed under authority of a special act of Congress approved March 4, 1907 (34 Stat. 1288); Mitchell Dam (Duncan's Riffle), Martin Dam (Cherokee

Bluffs), and Jordan Dam (Lock 18) were constructed under licenses granted pursuant to the Federal Water Power Act (41 Stat. 1063). Such dams have a total installed capacity of 332,500 kw.

The total generation in all plants owned by the company for the years 1932 to 1936, inclusive, was 7,881,678,312 kwh. of which 7,485,791,438 kwh. or 95%, was generated in the hydroelectric plants and 395,706,874 kwh., or 5%, generated in steam and other plants. The total generation for the 5-year period in the hydroelectric plants at Lay Dam, [fol. 834] Mitchell Dam, Martin Dam, and Jordan Dam was 6,158,950,000 kwh., which was 78.2% of the generation in all plants owned by the company. For this same 5-year period Mitchell Dam supplies 16.2% of the generation in all plants owned by the company; Martin Dam supplied 17.6%; Jordan Dam 26.4%; and Lay Dam 18%; Mitchell, Martin, and Jordan plants thus supplying a total of 60.2% of such generation.

In the applications to the Federal Power Commission for these licenses it was stated that these projects would be interconnected with the company's integrated system and would serve the markets in northern, central, and other portions of Alabama into which this transmission-line system extended. The licenses issued pursuant to these applications required the company to install certain generating units of specified minimum generating capacities in these projects serving these markets, which generating units were installed by the company in compliance with the licenses, and the projects interconnected with the company's system. The licenses for the construction and operation of the Mitchell Dam and the Jordan Dam projects were issued by the Federal Power Commission on findings of fact that each of the dams was necessary, convenient, and best adapted to a comprehensive scheme of development, improvement, and utilization of the Coosa River. Both the special act of Congress (34 Stat. 1288) authorizing the construction and operation of the Lock 12 project (Lay Dam) and the licenses granted by the Federal Power Commission authorizing the construction and operation of the Mitchell Dam (Duncan's [fol. 835] Riffle), Jordan Dam (Lock 18), and Martin Dam (Cherokee Bluffs) contained as conditions to the authority granted requirements that the company at its own cost should construct certain navigation facilities at those pro-

jects and supply electric service for the operation of certain navigation facilities. In the fulfillment of the obligations imposed by these conditions the company has expended to date several hundred thousand dollars and is obligated in the future to expend an additional substantial sum.

3. Prior to the passage of the Tennessee Valley Authority Act on May 18, 1933, the Congress, by the Rivers and Harbors Act of July 3, 1930 (46 Stat. 918, 927-928), had adopted the recommendation of the Chief of Engineers made to the Congress in House Document No. 328, Seventy-first Congress, second session, which recommended the improvement of the Tennessee River from its mouth to Knoxville, a distance of some 652 miles, so as to create a 9-foot navigation channel over that entire distance by means of a series of low dams, each of which was to be constructed with locks 110 feet by 600 feet, at an estimated cost of approximately \$75,000,000. (This project is hereafter throughout these findings referred to as "the low-dam navigation plan.") These would be integrated with similar 9-foot developments on the Ohio and Mississippi Rivers and on other improved tributaries of the Mississippi, such as the Missouri, Illinois, and Kanawha Rivers.

4. According to the general practice of the Corps of Engineers, the low-dam plan for a 9-foot navigation channel would have an overdepth of 2 to 3 feet throughout, except [fol. 836] at the intermediate sill of the lock at Wilson Dam already in existence, where there is a controlling depth of 9 feet.

5. The recommendation of the Chief of Engineers adopted by Congress in the Rivers and Harbors Act of June 3, 1930, contains the provision that a high power dam might be built by private interests, States, or municipalities in lieu of any 2 or more of the low navigation dams which were recommended, so long as the construction of any such high power dams would not lessen the navigable capacity of the waterway, and with the further provision that if any such high power dams should be built before the low navigation dams (which would be rendered unnecessary by the construction of the high dams), then the United States should contribute to the cost of any such high power dam an amount equal to the estimated cost of the low navigation dams.

There are 149 feasible hydroelectric power sites upon the Tennessee River and its tributaries which, at a cost of approximately \$1,200,000,000, could be developed so as to produce approximately 5,000,000 kw. of firm capacity and 25,000,000,000 kwh. of energy annually, half of which would be produced by projects upon the main stream and the remainder by projects upon the tributaries. Prior to the date of the passage of the TVA Act privately owned power companies or other private interests had acquired or were in the process of acquiring most of the power-dam sites upon the main river, and private interests had acquired or were acquiring several of the power-dam sites upon the tributaries, but the construction of any such power dam had not been undertaken by any such private interest, nor was any such construction immediately in process on May [fol. 837] 18, 1933, when the TVA Act was passed granting TVA corporate power to construct high dams at any or all of the 149 sites upon the Tennessee River and its tributaries. Immediately upon the organization of the Tennessee Valley Authority its directors determined to and did thereafter oppose the granting of any licenses by the Federal Power Commission to any privately owned utility interest to construct power dams upon the Tennessee River or any of its tributaries.

6. In the fall of 1933 the TVA assumed the use, control, and possession of Wilson Dam and power plant upon the Tennessee River and U. S. Nitrate Plant No. 2 steam plant. Wilson Dam and power plant has an installed generating capacity of 184,000 kw. and an ultimate capacity of 444,000 kw.

7. TVA announced its intention to construct 10 dams upon the Tennessee River and its tributaries, in addition to Wilson Dam, in the report to Congress of March 31, 1936, on "The Unified Development of the Tennessee River System," and will have, upon completion of the plan (hereafter referred to as "the unified plan"), an initial power installation of 697,000 kw. and an ultimate power installation of 1,922,000 kw. with a firm-power capacity of 660,000 kw. and a firm annual energy output of 5,780,000,000 kwh., and has annually received appropriations from Congress in order to proceed with the construction program more rapidly than would be possible with funds from its earnings or its bonding power.

8. TVA has announced its intention to construct Fontana Dam and power project in North Carolina on the Little [fol. 838] Tennessee River, a tributary of the Tennessee River, which will be 450 feet high and 1,750 feet long, and the estimated initial cost is \$40,000,000 and the estimated ultimate cost is \$51,000,000, with an ultimate power installation of 180,000 kw. No appropriation has yet been made by Congress for the construction of this dam.

9. TVA has announced its intention to construct and has scheduled for construction an increase in the height of Wilson Dam, at an estimated cost of \$500,000. The estimated cost of the completed development is \$57,950,748.

10. TVA has announced its intention to increase the height of the Hales Bar Dam, a private dam constructed under congressional authority by the Chattanooga and Tennessee River Power Company, a predecessor of complainant, The Tennessee Electric Power Company. This increase in height will cost approximately \$4,000,000.

11. At 100% annual load factor the amount of firm power that can be produced by the TVA unified plan with regulation by the reservoirs on the tributaries is 660,000 kw. and the amount of firm energy is 5,780,000,000 kwh., which is more than 5 times greater than the amount which would be produced by the TVA dams upon the Tennessee River if the tributary dams of Norris, Fowler Bend, and Fontana were not constructed.

12. At 60% annual load factor the firm power produced by the TVA unified plan, excluding the U. S. Nitrate Plant No. 2 steam plant, would be 1,100,000 kw., and the average annual firm energy would be 5,780,000,000 kwh. per year. The firm-power capacity of all the plants included in the TVA unified plan, including U. S. Nitrate Plant No. 2 steam [fol. 839] plant, at 60% annual load factor would be 1,200,000 kw., and the available firm energy would be 6,307,000,000 kwh. per year.

13. At 60% load factor in a low-water year the total available energy from the plants included in the TVA unified plan, including Wilson Dam, would be 7,667,000,000 kwh. energy, of which 5,780,000 would be firm energy and 1,887,000,000 kwh. would be secondary energy available less than 75% of the time.

14. The total available energy under the TVA unified plan in an average-water year would be 10,000,000,000 kwh. per year and the secondary energy 4,220,000,000 kwh. per year.

15. The low-dam navigation plan could have been constructed for less than \$75,000,000. The estimated cost of the TVA unified plan is more than \$473,000,000. The additional expenditure of approximately \$400,000,000 involved in the TVA unified plan is not an expenditure for the benefit of navigation, but for some other purpose.

16. The completion of either the low-dam navigation plan recommended by the Chief of Engineers and adopted by Congress or the TVA unified plan would result in slack-water navigation over the entire length of the Tennessee River from its mouth to Knoxville. The extreme low-water flow of the Tennessee River is far in excess of the needs of navigation on such a slackwater system. Any enrichment of the low-water flow by reason of releases from tributary reservoirs would be of no benefit to navigation upon the Tennessee River, and their effect, if any, would be unfavorable to navigation.

[fol. 840] 17. Present and prospective benefits from the construction of the low-dam navigation plan would not justify its cost, and much less would such benefits justify the cost of the high-dam TVA plan. The recommendation of the Chief of Engineers, adopted by the Congress in the Rivers and Harbors Act of July 3, 1930, provided for a 9-foot low-dam navigation channel on the Tennessee River, but contemplated that it should be constructed gradually over a considerable period of years in order that it might reach economic justification.

18. Norris and Hiwassee Dams are obstacles, and Fontana Dam will be an obstacle, to through navigation upon the Clinch, Hiwassee, and Little Tennessee Rivers, respectively, and will have no value to navigation upon the Tennessee River when the TVA plan is completed.

19. Under the low-dam program there would be incidentally produced 4,400 kw. of firm power and about 5,600 kw. of secondary power for the operation of the locks. The firm power available at Wilson Dam before the construction of any of the TVA high dams was about 28,000 kw., and under the TVA high-dam program there will be produced

660,000 kw. of firm power from all dams, excluding the Sheffield steam plant.

20. There will be no material difference in the benefits to navigation upon the Tennessee River between the low-dam plan and the TVA high-dam plan, and there would be no difference in pool fluctuations between the low-dam navigation plan and the high-dam plan at the 4 principal terminal sites upon the Tennessee River of Florence, Sheffield, [fol. 841] Chattanooga, and Knoxville. No additional expenditures over and above the cost of the low-dam plan for navigation are justified to improve navigation upon the Tennessee River.

21. The TVA unified plan for the development of the Tennessee River is not primarily designed to promote navigation upon the Tennessee River and its tributaries.

22. The TVA high-dam plan is not integrated with the navigation developments on the Ohio and Mississippi Rivers, for the wide waters in the lakes created by the TVA high dams require a different type of transportation equipment from that commonly used upon the Ohio and Mississippi Rivers.

23. When a private power company builds a dam and reservoir upon a navigable stream under a Federal Power Commission license all such navigation facilities must be approved by the Chief of Engineers, which approval the TVA has also secured in constructing its main-stream dams.

[fol. 842] 24. If work had been started in 1933 the low-dam plan for navigation upon the Tennessee River could now have been completed for the amount already expended by TVA for the construction of Wheeler and Norris Dams alone.

25. The operation of Norris Dam and the completed Hiwassee Dam will permit the manipulation of the pools of the main-river dams for power purposes and permit daily peaking to meet the utility load curve.

26. The practical working capacity, which is 20% of the theoretical capacity, of the Tennessee River for navigation under the low-dam plan would be:

(a) For through traffic from Knoxville to the Ohio River 5,060,000 tons per year.

(b) Below Florence 31,540,000 tons per year.

(c) From the head of Wilson lake to the Hales Bar Dam 34,280,000 tons per year.

(d) Above Chattanooga 35,840,000 tons per year.

27. The practical working capacity of the Tennessee River for navigation under the high-dam plan is limited:

(a) For through traffic from Knoxville to the Ohio River by the capacity of the locks at Wilson Dam to 5,960,000 tons per year.

(b) Below Florence by the capacity of the lock at Pickwick Landing Dam to 26,280,000 tons per year.

[fol. 843] (c) From the head of Wilson lake to the Hales Bar Dam by the capacity of the lock at Wheeler Dam to 9,520,000 tons per year.

(d) Above Chattanooga by the capacity of the lock at Coulter Shoals to 8,900,000 tons per year.

28. The theoretical capacity of the Tennessee River for navigation under the low-dam plan would be:

(a) For through traffic from Knoxville to the Ohio River 29,800,000 tons per year.

(b) Below Florence 157,700,000 tons per year.

(c) From the head of Wilson lake to Hales Bar Dam 171,400,000 tons per year.

(d) Above Chattanooga 179,200,000 tons per year.

29. The theoretical capacity of the Tennessee River for navigation under the high-dam plan is limited:

(a) For through traffic from Knoxville to the Ohio River by the capacity of the lock at Wilson Dam to 29,800,000 tons per year.

(b) Below Florence by the capacity of the lock at Pickwick Landing Dam to 131,400,000 tons per year.

(c) From the head of Wilson lake to Hales Bar Dam by the capacity of the lock at Wheeler Dam to 47,600,000 tons per year.

(d) Above Chattanooga by the capacity of the lock at Coulter Shoals to 44,500,000 tons per year.

[fol. 844] 30. Under the low-dam plan of navigation the movable dams are lowered when river stages are sufficient to provide project depths without dams, making it unnecessary to use the locks for passing navigation. During those periods, which are as great as 67% of the time, depending upon location, the capacity of the waterway is practically unlimited, for which no allowance has been made in calculating the practical working capacity under the low-dam plan.

31. The estimate of the Corps of Engineers of the United States Army of the cost of the low-dam plan at \$74,709,000 is reasonable. The cost of the high-dam program, exclusive of the cost of Wilson Dam, as estimated by the Tennessee Valley Authority, is \$473,649,650.

32. The annual estimated maintenance and operating cost of the low dams, exclusive of Wilson Dam, Dam No. 1, and Hales Bar Dam, would be \$1,580,000. The annual estimated minimum maintenance and operating cost of the Tennessee Valley Authority's high-dam program chargeable to navigation alone, exclusive of Hales Bar Dam, is \$994,000.

33. The Tennessee Valley Authority's unified plan for the development of the Tennessee River includes the construction of 7 main-river dams and 3 dams on tributary streams, in addition to Wilson Dam, Dam No. 1, and Hales Bar Dam already in existence. The lift at Gilbertsville Dam will be 68 feet, at Pickwick Landing Dam 61 feet, at Wheeler Dam 53 feet, at Guntersville Dam 45 feet, at Chickamauga Dam 53 feet, at Watts Bar Dam 71 feet, and at Coulter Shoals Dam 71 feet.

[fol. 845] 34. Except for Wilson Dam, Dam No. 1, and Hales Bar Dam already in existence, the dams in the TVA high-dam program above Wilson Dam will have locks which are 60 feet by 360 feet, but no provision has been made in the construction of Norris and Hiwassee Dams for the installation of locks or barge lifts, and under the low-dam plan all locks would be 110 feet by 600 feet.

35. Larger tows can pass through the larger low-lift locks of the low-dam plan with less loss of time than they can

through the smaller locks of much higher lift of the high-dam plan.

36. Depths in a navigable stream beyond those depths necessary to eliminate bottom friction are of no value to navigation, and when those depths are excessive they are a hazard to navigation, making it difficult to ground vessels immediately in case of accident and making salvage operations more difficult or impossible.

37. The width of inland waterways should be limited, as the high waves resulting from winds on excessively wide waterways are a hazard to navigation.

38. The TVA pools have sufficient depths for extensive widths to allow winds to create waves of 3 feet and higher.

39. The theoretical efficiency for navigation, as compared with a hypothetical perfect waterway, taking into consideration minimum and maximum widths and depths, maximum curvatures and current velocities, elimination of lockages, adequacy of water supply, and circuitry factor, under the low-dam plan is 67.4% and under the TVA high-dam plan is 70.6%.

[fol. 846] 40. The theoretical difference between the efficiency of the low-dam and the efficiency of the TVA high-dam plan has no practical significance to navigation.

41. The justifiable capital expenditures for the improvement of navigation upon the Tennessee River for existing traffic would be \$28,600,000, of which \$24,600,000 has already been expended for navigation improvements.

42. The average annual commerce upon the Tennessee River at the end of the 30-year period after the creation of a 9-foot channel is estimated to have increased by 5,000,000 tons, for which the average annual increased transportation savings are estimated at \$3,180,000. For the increased traffic and transportation saving, the justifiable investment in navigation improvements would be between \$35,600,000 and \$48,000,000, depending upon the type of improvements to be made.

43. The cost of the construction under the low-dam program would exceed the justifiable investment for the improvement of navigation upon the Tennessee River for future commerce by \$39,400,000, and the cost of the con-

struction of the TVA high-dam program, exclusive of the cost of Wilson Dam, exceeds the justifiable investment for the improvement of navigation for future commerce by \$425,650,000.

44. The flood damages to navigation on the Tennessee River are negligible in character (do not exceed \$25,150 annually) and would not be reduced by the TVA unified plan in an amount sufficient to justify any capital expenditure.

[fol. 847] 45. The completion of the TVA unified plan would not eliminate any measurable amount of flood damages to navigation on the Mississippi River. It is not proposed by the TVA to improve navigation upon the Mississippi River.

46. The greatest practicable protection against flood damage to property, and injury or death of persons by floods at and above Chattanooga may be achieved by a system of detention reservoirs for flood protection only located on the tributaries of the Tennessee River and costing approximately \$81,000,000. Such a system of detention reservoirs will provide substantially 10 times as much dependable flood control and flood protection at Chattanooga and above as would be achieved by the construction of the TVA unified plan.

47. The present system of flood protection and flood control on the Mississippi River below Cairo consists of levees, bypasses, and channel rectification. This system was originally known as the Jadwin plan, which was adopted by the Congress in 1928 after the great flood of 1927. Since that time the Jadwin plan, although not yet completed, has taken care of every flood which has occurred on the lower Mississippi, including the great flood of 1937. Recently General Markham, then Chief of Engineers, recommended certain modifications, which included changes in the bypasses and channel rectification which experience had shown was very effective in reducing flood heights within the levees.

48. The construction of the TVA unified plan would not avoid the necessity of completing the Jadwin-Markham plan [fol. 848] or decrease its cost by a single dollar. At most it might in peculiar conditions surrounding a given flood, make unnecessary the use of some of the bypasses. The flowage rights in the bypasses or floodways have been or

will be, according to the plan, purchased by the Government and are, in any case, flooded only once in 10 or 12 years, with relatively small damage.

49. Evidence in the record and documents, of which the Court may take judicial notice, established that for a period of over 50 years the Chief of Engineers has held that storage reservoirs on tributary streams are of uncertain, negligible, and undependable value for flood protection on the Mississippi, and that their value for flood protection, power development, and other local uses far exceeds any possible value for flood protection on the Mississippi.

50. Of the total damage to cities and towns on tributaries of the Tennessee River, both in a very great flood and in the average annual flood, more than 75% occurs on the Emory River, where the estimated average annual damage is \$153,700; and the total annual flood damage to all cities and towns on all tributaries of the Tennessee River, including the Emory River, is \$204,435. The TVA unified plan makes no provision for the construction of any dam on the Emory River.

51. The estimated average annual damage from all floods to cities and towns upon the Tennessee River and its tributaries is \$932,985, of which \$923,685 occurs at and above Chattanooga and \$9,300 occurs below Chattanooga.

[fol. 849] 52. The estimated average annual damage from all floods to railways upon the Tennessee River and its tributaries is \$350,118, of which \$343,258 occurs at and above Chattanooga and \$6,860 occurs below Chattanooga.

53. The estimated average annual damage from all floods to highways is \$158,105, of which \$89,110 occurs at and above Chattanooga and \$68,995 occurs below Chattanooga.

54. The 4 largest floods upon the Tennessee River have occurred in March and April. If it were necessary to provide a storage for the generation of a certain amount of firm power by the first of March in each year which encroached upon the flood storage, the dependable flood storage available for the floods in March and April would be reduced.

55. It is not possible to predict on January 15, February 15, March 15, or April 15 of any year whether the rest of

the year will be as dry as 1925, or to predict rainfall; and reservoirs cannot be operated upon hindsight.

56. A storm which would produce the greatest flood to be anticipated at and above Chattanooga would have a total rainfall of 11 inches over the entire drainage area of 21,400 square miles, except upon the Emory River and the upper reaches of the French Broad River, where the total rainfall would be 13 inches, would have a 90% run-off during the storm, and would last 3 days.

57. The maximum practicable protection against flood damages upon the Tennessee River and its tributaries would be secured by the construction upon all main tributaries of [fol. 850] the Tennessee River above Chattanooga of a system of 19 detention reservoirs which would be kept empty, or dry, except during floods, and would be located as follows:

- (a) 4 on the Hiwassee River;
- (b) 4 on the French Broad River and its tributaries;
- (c) 5 on the Holston River and its tributaries;
- (d) 2 on the Little Tennessee River;
- (e) 1 on the Clinch River; and
- (f) 3 on the Emory River and its tributaries.

58. The system of 19 detention reservoirs would control 16,713 square miles of the total drainage area above Chattanooga of 21,400 square miles, would generate no power, and would achieve no other result except flood-control protection, and would in no way be inconsistent or interfere with the low-dam plan for navigation upon the Tennessee River.

59. The system of 19 detention reservoirs would operate so that while the reservoirs are being filled a constant flow is discharged through the total area of the openings in the dam and, when filled, the opening of the lowest reservoir of each of those principal tributary groups would be maintained at a constant and fixed rate of discharge, so as to keep the discharge below the reservoir as nearly as possible at bankful stage. The upper reservoirs on each tributary would have their discharge vary within a considerable range so as to suit conditions obtaining for any particular flood. When these reservoirs collect any floodwaters, these waters

are released just as soon as it is safe to do so from the standpoint of the streams below.

[fol. 851] 60. The system of 19 detention reservoirs upon the tributaries of the Tennessee River above Chattanooga would give the maximum practicable protection to life and property from large floods.

61. Under the TVA high-dam plan only Fontana Dam on the Little Tennessee River, Norris Dam on the Clinch River, and Fowler Bend Dam on the Hiwassee River will provide a certain measure of control of floodwaters from 25% of the drainage area above Chattanooga, and the 3 tributary dams, together with Coulter Shoals, Watts Bar, and Chickamauga Dams on the main stream, will provide only 620,000 acre-feet of dependable flood storage for runoff from the 21,400 square miles in the drainage area above Chattanooga, and will permanently flood 110,870 acres. All the dams in the TVA high-dam plan will permanently flood at normal pool level 374,840 acres, and the Corps of Engineers of the United States Army has estimated that the total land which would be temporarily flooded by a great flood occurring only every 500 years would be 480,000 acres between Knoxville and the mouth of the river. The proposed system of 19 detention reservoirs upon the tributaries of the Tennessee River would have a dependable flood-storage volume of 6,263,700 acre-feet, would flood no land permanently, would flood 132,285 acres temporarily at the time of the greatest flood, and would provide a large measure of effective control over 78% of the drainage area above Chattanooga.

62. Under the TVA high-dam plan, at the time of the greatest flood, if part of the power storage in the TVA high-dam reservoirs were drawn down, the peak of the great flood at Knoxville of 68.3 feet would not be reduced; at Loudon the peak of the great flood would be reduced from [fol. 852] 71.5 feet to 66.2 feet; and at Chattanooga the peak would be reduced from 73 feet to 67.7 feet; and at Harri-man, on the Emory River, the peak of the great flood of 63.7 feet would not be reduced. Under the proposed system of 19 dry reservoirs, at the time of the greatest flood the peak at Knoxville would be reduced to 27.1 feet; at Loudon to 33.9 feet; at Chattanooga to 53.9 feet; and at Harriman to 39.8 feet.

63. The estimated reduction of the maximum flood at Chattanooga of 73.0 feet to 53.9 feet by the system of 19 detention reservoirs would be sufficient to render practicable the construction of levees at Chattanooga for local flood protection. The reduction of the maximum stage of 73.0 feet at Chattanooga to 67.7 feet by the TVA unified plan is not sufficient to render practicable the construction of levees at Chattanooga for local flood protection.

64. The TVA unified plan gives no protection on the Emory River, where 22 persons were drowned in the flood of March 1929. The system of 19 detention reservoirs would reduce the maximum flood of 63.7 feet at Harriman, on the Emory River, to 39.8 feet, which is below flood stage.

65. The Chickamauga Dam is completely drowned out, the top of the gates being under 7 to 9 feet of water, by the maximum flood to be expected at Chattanooga.

66. The operation of Wheeler and Wilson reservoirs during the period of the 1937 flood increased the flood peak at Cairo by releasing 7,000 second-feet more than flowed into those reservoirs during that period and was typical of how they will be operated.

[fol. 853] 67. The estimated cost of the construction of a system of 19 detention reservoirs solely for flood-control purposes is \$81,133,600, and the estimated cost of the TVA high-dam program, exclusive of Wilson Dam, is \$473,650,000. The average annual maintenance cost of the system of 19 dry reservoirs would be \$400,000.

68. The amount of power which can be produced by the plants included in the TVA unified plan, over and above the firm-power capacity of the Wilson power plant as it was originally constructed, is 1,072,000 kw. at a 60% annual load factor. No firm power of any kind would be produced by the construction of the proposed system of 19 dry reservoirs.

69. Under the TVA high-dam program the cost of construction of Norris Dam reservoir and the town of Norris upon the Clinch River was approximately \$36,300,000; its dependable flood-control storage is 497,000 acre-feet; and its dead storage for power purposes is 570,000 acre-feet and an additional power storage of 1,500,000 acre-feet.

Under the proposed system of 19 dry reservoirs a dam could have been constructed at the site of Norris Dam having a dependable flood-control storage of 1,312,000 acre-feet, impounding no water permanently for any purposes, and costing \$8,136,000.

70. Dead storage concentrates the fall of a stream as a substitute for a natural fall and is always permanently maintained solely for the creation of head for power purposes, with no incidental flood-control value. The bottom 135 feet at Norris Dam is dead storage with a capacity of 570,000 acre-feet. The power storage behind Norris Dam [fol. 854] of 1,500,000 acre-feet from elevation 955 to 1020 creates a head and storage for power production in the summer and fall and has no incidental dependable flood-control value. The Norris Dam from elevation 1020 to 1034 has a dependable flood-control storage of 497,000 acre-feet, which storage creates no incidental firm power. The dependable flood storage in the pure flood-control dam on the Clinch River, costing \$8,136,000, is 2.6 times as much as the dependable flood-control storage in the Norris Dam, costing \$36,310,000.

71. To increase the flow at Wilson Dam during a dry year from 4,300 second-feet to 18,900 second-feet it will be necessary to have 3,200,000 acre-feet of storage, which could not be retained during March and April of any year in the main-stream reservoirs above Wilson Dam without encroaching upon the flood surcharge in those reservoirs, and could only be stored in the Norris and Hiwassee reservoirs, requiring Norris to be maintained at or above elevation 1020 during February, March, and April of each year. Early in January 1937, Norris reservoir was filled to elevation 1010 and remained above that elevation through June 1937, during which period it reached elevation 1031 and flooded out surrounding highways.

72. Norris Dam, being maintained above elevation 1010 from January to June 1937, was not operated as a flood-control reservoir, since there is nothing in the record to show that it could not have been drawn down to provide flood storage without causing flood damage below.

73. Since great floods have occurred on headwaters of the Tennessee and nearby rivers during the summer or at any [fol. 855] time during the year, the operation of Norris

Dam in 1937 was not as a flood-control reservoir, and the proposed plan of operation of the TVA high dams upon the Tennessee River and its tributaries would not be for flood control but primarily for the purpose of power.

74. It is customary for power companies to shut down many of their hydroelectric plants on Sundays and holidays, when many of the industries served by them are not in operation, and from August 23, 1936, through October 4, 1936, the flow from Norris Dam on Sundays and Labor Day was shut off entirely.

75. To produce annually 600,000 to 700,000 kw. firm power for use on a utility system, without regard to the economics of its production and subject only to the limitation that there should incidentally result a 9-foot channel for navigation in the Tennessee River from its mouth at Paducah to Knoxville, a plan would be designed to construct exactly the same dams and power plants as are included in the TVA unified plan.

76. The development of the Tennessee River for the primary purpose of power development will be best achieved by constructing a small number of high dams rather than a large number of low dams, and under the TVA unified plan the 7 high dams provided for thereunder are the minimum number of dams practicable for the development of the Tennessee River.

77. The Mississippi River drains an area of approximately 1,240,000 square miles, covering all or part of 31 States and two Canadian provinces, and of which total area the Tennessee River drains 40,600 square miles.

[fol. 856] 78. A flood stage of 50 feet or greater at Cairo is considered dangerous, and such stages last between 30 and 60 days. The season of large floods upon the lower Mississippi is from the first of January to the first of June, but there have been floods that exceeded the flood stage in every month of the year except August and October. Floods upon the Tennessee River do not last more than two weeks.

79. The lower Mississippi Valley, from Cairo to the Gulf, has an area of about 50,000 square miles, of which in its original state approximately 30,000 square miles were subject to flood, and which flooded area, upon the completion of the modified Jadwin plan for the control of floods upon

the Mississippi by the construction of levees and bypass channels, will be reduced to 10,000 square miles. Channel improvements have increased the capacity of the Mississippi River to approximately 1,900,000 cubic feet per second, and upon the completion of the modified Jadwin plan the capacity of the lower Mississippi will be 3,000,000 cubic feet per second, the volume of the maximum flood to be anticipated.

80. There is a conflict in using the same dams for both flood-control and power purposes. Flood-control reservoirs should be empty until the flood arrives, then filled to reduce the floodwaters, and when the flood has passed, should be emptied in order to be available to catch the next flood. Power reservoirs must be filled as early as practicable to conserve water for low-water periods and to maintain a maximum head in the reservoir for power generation. Filling the reservoir capacity early in the season for power purposes will decrease the capacity of that reservoir for flood control.

[fol. 857] 81. Tributary reservoirs cannot be operated simultaneously for local flood protection, which requires the release of floodwater immediately after the passing of the local flood danger, and for the reduction of peak stages on a distant river into which the tributary flows, which requires the reservoirs to be kept empty, regardless of local flood conditions, until a dangerous stage occurs upon the main river.

82. Valley storage is the natural storage of the river and has the same effect as detention storage reservoirs, reducing peak stages and discharge below but increasing the duration of the flood. The valley storage of the Tennessee River in the 1926 flood amounted to 8,000,000 acre-feet, and in the largest flood to be anticipated would amount to approximately 14,000,000 acre-feet. Dead storage furnishes a head for power generation and reduces the available valley storage capacity, which in turn increases flood stages below the reservoir.

83. The controllable storage capacity of a reservoir is variable, as it is dependent upon the stream flow at the time the storage operations begin, and it may be reduced to nothing if the dam is completely flooded out.

84. Since the Corps of Engineers of the United States Army took over the exclusive control of the levees and flood-protection facilities upon the Mississippi River in 1928 under the Jadwin plan, every flood, including the 1937 flood, has been successfully handled, and the completed Jadwin plan, as modified by the Markham plan in the act of June 15, 1936, would have been sufficient to control the floods [fol. 858] upon the Mississippi of 1912, 1913, and 1927, in addition to the flood of 1937.

85. For attaining flood control only without reference to other uses it would not be necessary to fill the reservoirs partly. The partial filling is not for flood control but is for the benefit of low-water regulation. Low-water regulation increases firm power.

86. TVA at the end of the year 1934 owned and operated 157.8 miles of electric transmission lines; at the close of the year 1935 it owned and operated 274.3 miles of such lines; at the end of the year 1936 it owned and operated 1,068 miles of such lines; and as of October 15, 1937, owned and operated 1,286.9 miles of transmission lines; had 79.1 miles under construction and 176.9 miles authorized by its board of directors for construction; or at the close of the year *year* 1937, a total of 1,542.9 miles of transmission lines either constructed, under construction, or authorized for construction by the board of directors. The high-tension transmission lines constructed and now being operated by TVA extend across the State of Tennessee, the northwestern portion of the State of Georgia, the northern portion of the State of Alabama, and the northern section of the State of Mississippi.

87. At the end of the year 1934 TVA owned and operated 8 substations with a total capacity of 9,725 kva.; at the close of the year 1935 it owned and operated 14 substations with a total capacity of 36,275 kva.; at the close of 1936 it owned and operated 47 substations with a total capacity of 175,720 kva.; and as of October 15, 1937, owned and operated 55 substations with a total capacity of 219,010 kva., had under construction [fol. 859] 3 substations with a total capacity of 87,500 kva., and 4 substations authorized for construction by its board of directors with a total capacity of 39,500 kva.; or at the close of the year 1937, 62 substations with a total

capacity of 346,010 kva. either constructed, under construction, or authorized for construction by the board of directors.

88. The Tennessee Valley Authority has expended up to June 30, 1937, for transmission lines a total of \$7,924,164, for substations a total of \$2,826,756, and for temporary substations a total of \$406,208, making a total investment of \$11,157,128. TVA's estimated expenditures for additional transmission lines, substations, and other miscellaneous system equipment for the fiscal years ending June 30, 1938, and June 30, 1939, amount to \$4,700,000 and \$5,560,000 respectively. TVA has also acquired and is now operating for standby purposes a steam plant at Tupelo, Mississippi, and a steam plant at Corinth, Mississippi.

89. As of June 30, 1937, TVA owned and directly operated electric distribution facilities in the counties of Colbert and Lauderdale, Franklin and Morgan, Alabama, serving 1,774 retail customers, which distribution facilities were located in the rural areas of these counties and in the towns of Waterloo, Magerum, Barton, Pride Station, Spring Valley, Littleville, Oakland, St. Florian, Green Hill, Center Hill, Killen, Center Star, Elgin, Lexington, Sewell, Anderson, Rogersville, and Alexander Cross Roads. This direct retail service was instituted by TVA on October 20, 1934, in Col-[fol. 860] bert County, and on December 4, 1934, in Lauderdale County, Alabama. As of June 30, 1937, the TVA was serving direct 1,074 retail customers in the counties of Lincoln, Knox, Roane, Union, and Anderson in the State of Tennessee, which direct retail service was instituted by TVA on October 1, 1933.

90. On August 25, 1935, TVA adopted and announced the following power policy:

1. The business of generating and distributing electric power is a public business.

2. Private and public interests in the business of power are of a different kind and quality and should not be confused.

3. The interest of the public in the widest possible use of power is superior to any private interest. Where the private interest and this public interest conflict, the public interest must prevail.

4. Where there is a conflict between public interest and private interest in power which can be reconciled without injury to the public interest, such reconciliation should be made.

5. The right of a community to own and operate its own electric plant is undeniable. This is one of the measures which the people may properly take to protect themselves against unreasonable rates. Such a course of action may take the form of acquiring the existing plant or setting up a competing plant, as circumstances may dictate.

6. The fact that action by the Authority may have an adverse economic effect upon a privately owned utility should be a matter for the serious consideration of the Board in framing and executing its power program. But it is not the determining factor. The most important considerations are the furthering of the public interest in making power available at the lowest rate consistent with sound financial policy, and the accomplishment of the social objectives which low-cost power makes possible. The Authority cannot decline to take action solely upon the ground that to do so would injure a privately owned utility.

[fol. 861] 7. To provide a workable and economic basis of operations, the Authority plans initially to serve certain definite regions and to develop its program in those areas before going outside.

8. The initial areas selected by the Authority may be roughly described as (a) the region immediately proximate to the route of the transmission line soon to be constructed by the Authority between Muscle Shoals and the site of Norris Dam; (b) the region in proximity to Muscle Shoals, including northern Alabama and northeastern Mississippi; and (c) the region in the proximity of Norris Dam (the new source of power to be constructed by the Authority on the Clinch River in northeast Tennessee).

At a later stage in the development it is contemplated to include, roughly, the drainage area of the Tennessee River in Kentucky, Alabama, Georgia and North Carolina, and that part of Tennessee which lies east of the west margin of the Tennessee drainage area.

To make the area a workable one and a fair measure of public ownership, it should include several cities of substantial size (such as Chattanooga and Knoxville) and, ulti-

mately, at least one city of more than a quarter million, within transmission distance, such as Birmingham, Memphis, Atlanta or Louisville.

While it is the Authority's present intention to develop its power program in the above-described territory before considering going outside, the Authority may go outside the area if there are substantial changes in general conditions, facts, or governmental policy, which would necessarily require a change in this policy of regional development, or if the privately owned utilities in the area do not cooperate in the working out of the program.

Nothing in the procedure here adopted is to be construed in any sense a commitment against extending the Authority's power operations outside the area selected, if the above conditions or the public interest require. Where special considerations exist, justifying the Authority's going outside this initial area, the Authority will receive and consider applications based on such special considerations. Among such special considerations would be unreasonably high rates for service and a failure or absence of public regulation to protect the public interest.

[fol. 862] 9. Every effort will be made by the Authority to avoid the construction of duplicate physical facilities, or wasteful competitive practices. Accordingly, where existing lines of privately owned utilities are required to accomplish the Authority's objectives, as outlined above, a genuine effort will be made to purchase such facilities from the private utilities on an equitable basis.

10. Accounting should show detail of costs, and permit a comparison of operations with privately owned plants, to supply a "yardstick" and an incentive to both private and public managers.

11. The accounts and records of the Authority as they pertain to power will always be open to inspection by the public.

This power policy was reported to the Congress in the first annual report of TVA.

[fol. 863] 91. Up to the present time TVA has entered into contracts for the sale of electric power with the following municipalities:

Municipality	Date of Contract
1. Tupelo, Mississippi.....	11-13-33
2. Knoxville, Tennessee.....	3- 1-34 (2-19-36) (5-18-36)
3. Pulaski, Tennessee.....	3- 8-34
4. Amory, Mississippi.....	3- 9-34 (10-15-36)
5. Russellville, Alabama.....	3-13-34
6. Decatur, Alabama.....	3-14-34
7. Sheffield, Alabama.....	3-14-34 (3-16-36)
8. Florence, Alabama.....	3-14-34 (7- 6-37)
9. Tuscumbia, Alabama.....	3-14-34 (3- 6-37)
10. Athens, Alabama.....	4- 8-34
11. Dayton, Tennessee.....	9-12-34
12. New Albany, Mississippi.....	9-13-34 (3- 1-37)
13. Muscle Shoals, Alabama.....	1-19-35
14. Okolona, Mississippi.....	4-23-35 (3-24-37)
15. Jackson, Tennessee.....	10-16-35 (9- 1-37)
16. Dickson, Tennessee.....	10-23-35
17. Holly Springs, Mississippi.....	11-12-35 (2- 2-37)
18. Memphis, Tennessee.....	12-23-35
19. Bolivar, Tennessee.....	12-31-35
20. Somerville, Tennessee.....	12-31-35
21. Milan, Tennessee.....	12-31-35
22. Guntersville, Alabama.....	5-21-37
23. Chattanooga, Tennessee.....	6-17-37
24. Middlesboro, Kentucky.....	7-29-37 (10-20-37)
25. Trenton, Tennessee.....	8-23-37
26. Paris, Tennessee.....	11- 2-37

92. Up to the present time the TVA has entered into contracts with the following rural cooperatives, or membership corporations, in the States of Mississippi, Alabama, Tennessee, and Georgia:

Name	Date of Contract
1. Alcorn County EPA.....	6- 1-34
2. Pontotoc EMC.....	2-15-35
3. Prentiss County EMC.....	6-13-35 (12- 1-37)
4. Monroe County EMC.....	7-19-35
5. Tishomingo County EPA.....	7-19-35
[fol. 864] 6. Meigs County EMC.....	10-14-35
7. Tombigbee EPA.....	10-19-35
8. North Georgia EMC.....	6-15-36
9. Cullman County EMC.....	8-14-36 (8- 4-36)
10. Gibson County EMC.....	8-13-36
11. Middle Tennessee EMC.....	8-13-36
12. Pickwick EMC.....	8-26-36
13. Duck River EMC.....	10-31-36
14. Southwest Tennessee EMC.....	12- 9-36
15. Northeast Miss. EPA.....	3-27-37 (7-27-37)
16. Joe Wheeler EMC.....	9-24-37
17. Cherokee County EMC.....	11- 2-37
18. Tippah County EMC.....	11- 5-37

94. Up to the present time TVA has entered into contracts to serve directly the following industrial customers:

[fol. 865]

96. All contracts for the sale of power by TVA to a municipality or a cooperative association expressly reserve in TVA control of resale rates and control of the operation of

the distribution facilities owned by the municipality or co-operative association.

97. All contracts between TVA and municipalities not owning at the time of the contract an electric distribution system contain the following provisions, among others:

(a) That the contract shall continue for a period of 20 years, and in some instances 30 years;

(b) That the municipality is to use all reasonable diligence in acquiring, by construction or purchase, a distribution system;

(c) That TVA will construct and install transmission and transformation facilities;

[fol. 866] (d) That the energy supplied the city will be metered at the low-tension side of the step-down transformer of the TVA substations, which point shall be the point of delivery;

(e) That municipality agrees to sell the electricity at the standard or uniform rates prescribed in the contract and not to depart therefrom except by consent of the TVA;

(f) That the revenues derived from the municipal distribution system will be expended only in the following order:

(1) In payment of operating expenses.

(2) In payment of interest, amortization charges, or sinking-fund payments on bonds applicable to the electric system.

(3) In the establishment of reserves for replacements, new construction, contingencies, and working capital.

(4) In paying to the city a return on the investment specified in the contract, to be a particular sum which is arrived at by taking the present appraised value of the property, less all outstanding liabilities incurred in the construction or acquisition of the system of not more than 6% per annum on the particular sum set forth, together with an amount stated to be equivalent to the municipal taxes, which is computed in accordance with the schedule of terms and conditions attached to and made a part of said contract.

(5) All remaining revenues to be devoted to the retirement of electric-system bonds so long as any such bonds are

outstanding, and if not so devoted shall serve as a basis for the reduction or elimination of surcharges, and thereafter for the reduction of rates by agreement of the parties.

(g) The recital of standard and uniform rules and regulations governing the municipality's operation of its distribution system, which rules and regulations are expressly agreed to be of the essence of the contract and which cannot be changed except with the consent of TVA. The following are some of the rules and regulations:

[fol. 867] (1) Requirement that municipality procure written service applications from customer before supplying service.

(2) Method of determining classification of customers for service.

(3) Requirement of deposit by customers to guarantee payment of electric bill.

(4) Designation of point of delivery to customer, standards of customer's wiring, right to inspect customer's wiring, payment by customer for installing underground wires, customer's responsibility for municipality's property, and access to customer's premises.

(5) Time and manner of rendering bills to customers and penalty for nonpayment by customer.

(6) Right of municipality to terminate service for violation of its rules and regulations.

(7) Reconnection charge and charges for temporary service.

(8) Resale by customers prohibited.

(9) Rules and regulations required to be made a part of all contracts between the municipality and its customers.

(h) Standard and uniform "terms and conditions" which are of the essence of the contract and which cannot be changed except with the consent of the TVA. Included among the terms and conditions are the following:

(1) Municipality required to administer electric system as a separate department and maintain a separate fund for

its electric revenues and not mingle them with other funds of the municipality.

(2) Municipality required to keep books of account of its electric operations according to the system and in the manner prescribed by TVA.

[fol. 868] (3) Municipality required to furnish TVA such financial and operating reports as may be requested.

(4) Municipality required to permit agents of TVA free access to books and records relating to electric operations.

(5) Method of determining "present value" of municipality's electric system and method of determining municipality's initial investment, which is defined as "present value" less all outstanding liabilities incurred in the construction or acquisition of the electric system.

(6) Municipality's return on investment as defined therein limited to 6% per annum.

(7) Manner of computing payments in lieu of municipal taxes on electric operations within the municipal limits.

(8) Requirement that electric department pay for electric services.

(9) Municipality not permitted to withdraw electric-department revenues for general funds in excess of allowable rate on investment and municipal-tax equivalent, unless municipality's investment reduced to the extent of such excess withdrawals.

(10) Municipal electric department limited to loans to general fund of municipality of one year or less without right of removal.

(11) Municipality required to publish at the end of each fiscal year a statement of its investment, outstanding loans and advances, and immediately furnish TVA with a copy thereof.

(12) Municipality during development period permitted to impose surcharge on classes of the customers subject to such surcharge under the standard schedule of resale rates provided for in the contract.

[fol. 869] (13) Adjustability of rates at which municipality purchases power for TVA dependent upon cost of living index for the United States as computed by the Department of Labor.

(14) Municipality not permitted to sell electricity for sub-metering or further resale.

(i) Municipality prohibited from discriminating between members of the same class of customers as provided for in the contract or from rebating or extending concessions to any customer.

(j) Assignment of contract prohibited without consent of TVA.

(k) TVA agrees to enter into negotiations for extension of contract at least 2 years before its expiration.

98. All power contracts made by TVA with municipalities then owning an electric distribution system, in addition to the above stated provisions, provide that:

The municipality shall add to the standard TVA resale rates a temporary amortization charge of 1¢ per kilowatt hour, such charge to be not less than 25¢ or more than \$1.00 per customer per month, for the purpose of amortizing the municipality's electric indebtedness, and values the electric system by taking its replacement cost new, less depreciation and the indebtedness applicable to the electric system.

The same provision is found in all contracts with cooperatives.

99. In some of the power contracts made by TVA with municipalities it is provided, in addition to the provisions referred to above, that:

(a) TVA will render without compensation such accounting, legal, and engineering assistance looking to the acquisition of the municipal distribution system as TVA may deem advisable or helpful.

[fol. 870] (b) Municipality agrees to grant a franchise to TVA over its streets and alleys for serving the city with electricity or the areas outside of the corporate limits.

(c) The municipality shall be permitted to jointly use TVA poles for its distribution lines.

(d) TVA will further the economic welfare of the municipality by fostering and promoting the increased use of electricity within the municipality.

100. All power contracts between TVA and cooperatives contain, among others, the following provisions:

(a) That the contractual period shall be 20 years.

(b) That the energy supplied will be delivered on the low-tension side of the substation or substations which are owned and operated by TVA.

(c) That after payment of operating expenses and certain specified costs and reserves, all remaining income shall be devoted to reimbursement of membership charges or to reductions in rates.

(d) That the cooperative shall not pledge, mortgage, or otherwise alienate, except in the normal course of business, its properties or revenues without the written consent of TVA.

(e) That the cooperative agrees to resell the electricity which it purchases from TVA at the standard or uniform resale rates prescribed in the contract and not to depart therefrom except with the consent of TVA.

(f) That the cooperative will not serve any non-member except with the consent of TVA.

(g) That the cooperative extend its memberships, without discrimination, to any person, corporation, co-partnership, municipality, political body or subdivision within the area of its service; that the minimum installment on memberships shall not be fixed at less than \$10 without first securing the written consent of TVA.

[fol. 871] (h) TVA to render, in some cases without charge, advisory services in personnel and administrative problems; to secure the attendance of its officers at meetings of the corporation, its board of directors or executive committee; to make available the facilities and services of its personnel division in the selection of employees; and to render professional services at the expense of the cooperative.

(i) That the cooperative will not employ persons deemed by Authority to be unqualified or unnecessary.

(j) That TVA shall have the right to use cooperative's poles and wires for transmission purposes and for service to industrial customers with a demand of 1,000 kw. or more.

(k) That cooperative will file annually with TVA a complete report in the form prescribed by TVA of the results of its operations, the condition of its property, and such other information as TVA may require, as well as such additional reports and information, from time to time, as TVA requests.

(l) That all employees who handle money of the cooperative shall be bonded.

(m) That the contract is not assignable or transferable without the consent of TVA.

(n) For "terms and conditions," which are of the essence of the contract and cannot be modified or changed without the consent of TVA, and which are substantially the same as those provided for in the contracts between TVA and municipalities herein referred to in finding 97 hereof.

(o) For a "schedule of rules and regulations," which are of the essence of the contracts and which cannot be changed or modified except by the consent of TVA. The provisions of the "schedule of rules and regulations" are substantially the same as those provided for in contracts between TVA and municipalities herein referred to at finding 97 hereof.

[fol. 872] 101. All of the TVA contracts with municipalities and cooperatives permit the purchaser to increase its demand for electric power upon specified notice, and in the majority of such contracts such increases are without limit as to the amount.

102. TVA has promoted the organization of rural cooperatives for the purpose of distributing TVA power, has directed and assisted in their organization and financing, and has controlled their operation. As a part of these activities it has issued minute instructions covering the procedure to be followed, as approved by it, in the organization of new cooperatives, including the forms of agreements to be entered into between the cooperative and its customers. It has directly assisted and advised the or-

ganizers of cooperative associations and their officers in all matters relating to the formal organization. It has prepared all contracts between TVA and such cooperatives. It has made the necessary surveys and studies and has assisted otherwise in the procurement of loans from REA. It pays the sum of \$15 toward the cost of wiring for electricity the houses of its customers and customers of co-operatives served by it if an electric water heater or range is installed, and \$30 if both appliances are installed.

103. TVA also supervises the operations of rural cooperative associations by selecting operating employees; by preparing their rules and regulations for operation; by setting up the forms in which the cooperative's books shall be kept; by attending meetings of the directors of the co-operatives; and by having copies of all correspondence of the cooperative sent to the TVA district manager.

[fol. 873] 104. The present generating facilities of the complainant companies are adequate to meet the present loads on their systems and, together with the additional capacity scheduled or already under construction, will adequately supply their power requirements for at least 2 or 3 years in the immediate future. A steam generating plant can be added to a system within 1 to 2 years, and a hydro plant can be added within 2 to 3 years.

105. The present generating facilities of the public utility companies operating within a 250-mile radius of any of the dams included in the TVA unified plan are adequate for the present loads in the territory and, together with the additional capacity definitely scheduled or already under construction, will be adequate to meet the estimated increased load growth during the years 1938 and 1939. The utility companies can readily build to meet any requirements subsequent to 1939 unless they are prevented by regulatory authority or by the impairment of their financial status by federal competition. In fact, in the past facilities have been constructed to provide for increment expansion. Increment expansion is an economic development of facilities and is provided in anticipation of load growth.

106. In the areas where TVA power is now available for rural distribution there is no substantial existing domestic demand beyond reach of existing distribution facilities,

which, at the present time, comes within the minimum requirements of applicable State regulations or within the recommended minimum requirements of 662 kwh. per month per mile as adopted by TVA in its "Rural Electrification Survey—Neighborhood Plan."

[fol. 874] 107. All of the high dams built and to be built by TVA will be united by heavy-duty transmission lines extending from the power dams on the tributaries of the Tennessee, designated as Norris, Hiwassee, and Fontana, to the Gilbertsville Dam on the main river somewhat above its mouth. This grid system constitutes a power pool from which at any point energy can be drawn without reference to the point of generation. The completed power pool under the unified plan will provide 660,000 kw. of firm energy, or 5,780,000,000 kwh. of firm energy per year.

108. The total amount of electricity generated for public use by public utilities during 1936 in the State of Tennessee was only a little over 1,000,000,000 kwh. The total generation for public use by public utilities in Tennessee, Alabama, and Mississippi in 1936 was only about 3,700,000,000 kwh. In 1936 the total generation of electricity for public use by public utilities in the 7 States in which any part of the Tennessee River basin lies; that is, Virginia, North Carolina, Georgia, Kentucky, Tennessee, Alabama, and Mississippi, was only about 9,300,000,000 kwh.

109. The market for electric power, as represented by total sales in the year 1936 to ultimate consumers, directly and indirectly by all public utilities and municipal systems, other than by TVA and its wholesale contractors, within a 100-mile radius of any of the dams included in the TVA unified plan, is 3,661,000,000 kwh. per year, and within a 150-mile radius of any of the dams included in the TVA unified plan, is 7,162,000,000 kwh. per year. The territory now being served by each of the complainant companies lies wholly or in large part within such 150-mile radius.

[fol. 875] 110. It is technically feasible to transmit power a distance of 250 miles without any relaying or intermediate feeding into the transmission lines, and it is commercially feasible to transmit electric energy from the TVA power pool for distribution in the area served by each of the complainant companies.

111. On September 14, 1933, the Tennessee Valley Authority announced its wholesale power rates and approved retail rates for the sale of electric energy.

112. Between 12,000 and 15,000 miles of transmission lines would be necessary to market the 7,670,000,000 kwh. of firm and secondary power which would be produced by the TVA in a normal-water year. The total transmission lines of the complainants are 11,314 miles. Defendant A. E. Morgan has estimated that it may require an expenditure of \$100-000,000 to complete the proposed transmission and distribution systems of TVA so that they will be an integrated unit.

113. Although the present high-tension transmission system so far constructed by TVA is only the beginning of the high-tension transmission system which will be necessary to deliver the vast amounts of power which will be available through the TVA power pool, the existing TVA high-tension transmission lines have already been extended to all of the large existing load centers in Tennessee, with the exception of Nashville; and upon completion of the proposed transmission line of the TVA to Nashville, the TVA transmission system will completely duplicate the transmission system of The Tennessee Electric Power Company. This high-tension transmission system of TVA interconnects all [fol. 876] of the generating facilities of TVA, is designed to serve more loads than are served at present by TVA, and can be readily extended to serve all of the principal load centers in the area served by the complainant companies. In the construction of certain of these transmission lines the Authority constructed said lines with an excess capacity of several times its initial operating load in anticipation of future load growth and possible extensions of such lines to other areas. If the existing TVA system had been designed for the purpose of serving small municipalities and rural customers, the engineering economics would have required the design of an entirely different type of system than the one so far constructed.

114. Prior to the organization of TVA there was no movement in the territories served by the complainant companies for municipal ownership of electric distribution systems, and in fact many existing municipally owned distribution systems were acquired by the complainant companies. Since

the organization and commencement of operation of the Tennessee Valley Authority the following cities served by complainant companies have entered contracts with the TVA:

Municipality	How Served
Florence, Alabama.....	Alabama Power Company
Sheffield, Alabama.....	Alabama Power Company
Tuscumbia, Alabama.....	Alabama Power Company
Athens, Alabama.....	Alabama Power Company (Wholesale)
Tupelo, Mississippi.....	Miss. Power Co. (Wholesale)
Jackson, Tennessee.....	West Tenn. Power & Lt. Co.
Decatur, Alabama.....	Alabama Power Company
Russellville, Alabama.....	Alabama Power Company
Guntersville, Alabama.....	Alabama Power Company
Knoxville, Tennessee.....	Tennessee Public Service Co.
Chattanooga, Tennessee.....	The Tennessee Electric Power Co.
Memphis, Tennessee.....	Memphis Power & Light Co.
Paris, Tennessee.....	Ky.-Tenn. Light & Power Co.

[fol. 877] The business in the City of Memphis represents the major part of the business of the Memphis Power & Light Company, and the business in the city of Knoxville represents 90% of the electric business of the Tennessee Public Service Company.

In addition, the following municipalities have held elections resulting in the authorization of a bond issue with which to acquire a municipally owned distribution system for the purpose of distributing TVA power:

Municipality	Present Service
1. Gallatin, Tenn.....	Ky.-Tenn. L. & P. Company
2. Newbern, Tenn.....	Ky.-Tenn. L. & P. Company
3. Clarksville, Tenn.....	Ky.-Tenn. L. & P. Company
4. Starkville, Miss.....	Miss. Power Company
5. Aberdeen, Miss.....	Miss. Power Company
6. Columbus, Miss.....	Miss. Power Company
7. Bessemer, Ala.....	Birmingham Electric Co.
8. Fairfield, Ala.....	Birmingham Electric Co.
9. Tarrant City, Ala.....	Birmingham Electric Co.
10. Hartselle, Ala.....	Alabama Power Company
11. Courtland, Ala.....	Alabama Power Company
12. Oneonta, Ala.....	Alabama Power Company
13. Town Creek, Ala.....	Alabama Power Company
14. Enterprise, Ala.....	Alabama Power Company
15. Scottsboro, Ala.....	Alabama Power Company
16. Albertville, Ala.....	Alabama Power Company
17. Columbia, Tenn.....	The Tenn. Electric Power Co.
18. Henderson, Tenn.....	West Tennessee P. & L. Co.
19. Lewisburg, Tenn.....	The Tenn. Elec. Power Co.
20. Fayetteville, Tenn.....	The Tenn. Elec. Power Co.
21. Etowah, Tenn.....	Power sold by the TEP Co. at wholesale.

115. In addition to the municipalities which have held elections to acquire a municipally owned distribution system for the purpose of distributing TVA power, the following cities and towns served by the complainant companies have officially applied for TVA power:

[fol. 878]

State and Town	How Served
Alabama:	
Boaz.....	Alabama Power Company
Cherokee.....	Alabama Power Company
Courtland.....	Alabama Power Company
Falkville.....	Alabama Power Company
Hartselle.....	Alabama Power Company
Huntsville.....	Alabama Power Company
Leighton.....	Alabama Power Company
Madison.....	Alabama Power Company
Moulton.....	Alabama Power Company
Red Bay.....	Alabama Power Company
Town Creek.....	Alabama Power Company
Vina.....	Alabama Power Company
Valley Head.....	Alabama Power Company
Kentucky:	
Trenton.....	Ky.-Tenn. L. & P. Co.
Mississippi:	
Coffeeville.....	Mississippi P. & L. Co.
West Point.....	Mississippi Power Co.
Tennessee:	
Adamsville.....	The Tennessee Elec. Power Co.
Clinton.....	The Tennessee Elec. Power Co.
Coal Creek.....	The Tennessee Elec. Power Co.
Columbia.....	The Tennessee Elec. Power Co.
Decaturville.....	The Tennessee Elec. Power Co.
Dresden.....	Ky.-Tenn. L. & P. Co.
Dyer.....	Ky.-Tenn. L. & P. Co.
Etowah.....	Power sold at wholesale to Etowah Power Co.
Fayetteville.....	The Tennessee Elec. Power Co.
Gallatin.....	Ky.-Tenn. L. & P. Co.
Gleason.....	Ky.-Tenn. L. & P. Co.
Greenfield.....	Ky.-Tenn. L. & P. Co.
Humboldt.....	West Tenn. P. & L. Co.
LaFollette.....	The Tenn. Elec. Power Co.
Lebanon.....	The Tenn. Elec. Power Co. sells power at wholesale to municipal system
Lenoir City.....	The Tenn. Elec. Power Co.
Lewisburg.....	The Tenn. Elec. Power Co.
Livingston.....	The Tenn. Elec. Power Co.

[fol. 879]

Martin.....	Ky.-Tenn. L. & P. Co.
Murfreesboro.....	The Tenn. Elec. Power Co.
Obion.....	Ky.-Tenn. L. & P. Co.
Oliver Springs.....	The Tenn. Elec. Power Co.
Parsons.....	The Tenn. Elec. Power Co.
Ripley.....	West Tenn. P. & L. Co.
Rockwood.....	The Tenn. Elec. Power Co.
Rogersville.....	Holston River Elec. Co.
Rutherford.....	Ky.-Tenn. L. & P. Co.
Savannah.....	The Tenn. Elec. Power Co.
Sharon.....	Ky.-Tenn. L. & P. Co.
Winchester.....	The Tenn. Elec. Power Co.

[fol. 880] 116. The electric-power business is not static. The electric-power production in the Nation as a whole has followed the trend of industrial activity, reaching a low point in March, 1933. With the business recovery beginning in 1933, electric power production increased sharply until the late summer of 1937. The trend of electric-power production and sales among the complainant companies has followed the trend in the Nation as a whole. During the years 1929 to 1933 the electric-power demand of the complainant companies declined, due largely to the reduction in the industrial demand during that period. With the resumption of industrial activity there has been, beginning with 1933 and continuing to the latter part of 1937, a very substantial increase in the electric-power demand of the complainant companies. Since September 1937 and prior thereto, for certain complainants there has been a definite decline in the electric-power demand of the complainant companies.

Over the period of the past 8 to 12 years the average increase in electric-power demand of the complainant companies has been at a rate of approximately 5% per year, and there has been a corresponding steady increase in their facilities. This normal expectancy of growth and increased business is a valuable right and asset of each of the complainant companies, and the loss of such expectancy of growth is a substantial injury to their properties and businesses.

117. Of the larger industrial power consumers with which TVA has made contracts, the Rockwood Alabama Stone Company is a former customer of the Alabama Power Company.

The Monsanto Chemical Company purchased power requirements for its phosphoric-acid operations from the Alabama Power Company, the revenue from which business [fol. 881] amounted to \$387,000 per year. Upon the removal of the phosphoric-acid operations of such company to Columbia, Tennessee, The Tennessee Electric Power Company entered into negotiations with said chemical company to furnish it with 50,000 kw. of power at its Columbia, Tennessee, plant, and after agreeing upon the terms of a proposed contract, Monsanto Chemical Company questioned the financial responsibility of The Tennessee Electric Power Company because of the competitive operations of TVA and refused to accept an offer to deposit \$1,500,000 of the first mortgage bonds of The Tennessee Electric Power Company as a guarantee of performance of the contract, for the reason that the securities offered were unsatisfactory because the competitive situation created by TVA.

L. N. Gross Company, in 1936, with the aid of the Tennessee Electric Power Company, located a plant at Fayetteville, Tennessee, and electricity was furnished during the construction period by The Tennessee Electric Power Company. Upon completion of construction said power company, at the request of said L. N. Gross Company, connected electric service after installing a substation of sufficient size and capacity to accommodate the load. Thereafter L. N. Gross Company terminated its service and purchased TVA power.

Volunteer Portland Cement Company was the largest industrial customer of Tennessee Public Service Company, from which it received an annual revenue approximating \$125,000. A transmission line with a capacity many times in excess of said cement company's requirements, and which will be available for service to future loads in that area, [fol. 882] was constructed by TVA from Norris Dam to said cement company's plant, a distance of approximately 20 miles, at an expenditure of \$269,000. On September 14, 1937, TVA assigned said contract to the city of Knoxville, and although TVA will supply power direct to Volunteer Portland Cement Company, said city will pay TVA for the power so delivered at the standard wholesale rates, as provided for in the contract between TVA and the city of Knoxville, and will collect from Volunteer Portland Cement

Company at the standard resale rates, as provided in said complainants' exhibit 118. There has been agitation among other industrial customers of Tennessee Public Service Company for power to be served from the line which the TVA constructed to the premises of Volunteer Portland Cement Company or extensions of it.

118. All of the industrial and municipal customers now being served or under contract with TVA could be served by one or another of complainant companies.

119. All of the rural cooperative systems which have been constructed by TVA and are now distributing TVA power could be served by one or another of the complainant companies without substantial change or addition in their existing transmission or substation facilities.

120. The completion of the generating plants called for in the TVA unified plan and the marketing of the power generated thereby will cause substantial damage to all the complainants.

[fol. 883] 121. The completion of the generating plants called for in the TVA unified plan and the marketing of the power generated thereby will result in 3 types of displacement of the complainants' facilities:

(a) Permanent displacement of complainants' distribution facilities in those areas where TVA power is actually distributed and also permanent displacement of transmission lines and substations immediately supplying such areas. For example, in the case of The Tennessee Electric Power Company, over $\frac{1}{3}$ of its total demand is represented by the city of Chattanooga; the company now has 5 high-tension transmission lines serving the Chattanooga area, and the loss of the business in Chattanooga will result in the destruction of over one-third of the usefulness of the company's electric property.

(b) Temporary displacement of complainants' facilities of other kinds, either rendered temporarily idle or forced to operate at greatly reduced loading, which temporary displacement may be ultimately terminated by future growth of the remaining load of the utility system or may become permanent if TVA continues its expansion in any particular territory.

(c) Impairment of the value of existing generating facilities and transmission lines through loss of the market for which they are adapted and were originally designed; and the incurrence of cost of additional transmission facilities which will be required in order to deliver power, from the generating plants whose natural market has so been taken to the nearest market which may be available.

122. The construction and operation of rural distribution lines under TVA contracts results in substantial damage to the property and business of the complainant companies, through whose territory such lines have been or may be constructed in the following respects.

(a) When distribution or transmission lines are projected they are constructed with a view of ultimately interconnecting with other existing lines to complete a loop in order to give two-way service and in order to control voltage and continuity of service. Where competitive systems are constructed in the same manner, such interconnections become impossible without extending service over territory already served by the competitive system.

[fol. 884] (b) The inability to develop normally because of the presence of the duplicating system results in less dependable and more expensive service.

(c) Expansion of both systems is made more expensive through the necessity of making cross-overs and through the necessity of extending lines through areas served by the competitor.

This damage is accentuated by the fact that in many instances the rural distribution lines of membership corporations distributing TVA power have been constructed in the immediate vicinity of the load centers now being served by complainant companies.

123. The activities of TVA have already destroyed the credit of those complainant companies in whose territory the TVA is now operating and has substantially impaired the credit of all of the other complainant companies, with the exception of the Appalachian Electric Power Company. This has made it impossible for the companies in this area

to take advantage of favorable credit conditions to refund existing indebtedness and thereby lower their fixed charges. It has made it impossible for such companies to obtain new money for purposes of expansion.

124. With the exception of the Franklin Power & Light Company, which was not incorporated until 1929, and the Southern Tennessee Power Company, each of the complainant companies and their predecessors have grown and expanded their systems and organizations to meet the changing and growing economic needs of the territories which they respectively serve. At the time of the organization and commencement of operations of such complainant companies electricity was not generally used for industrial power purposes, and it was necessary for the complainant companies to develop the market for the sale of electricity for use as industrial power. In so doing, through extensive research, sales and promotional activities, particularly in the case of the larger complainant companies, they have [fol. 885] over a period of years stimulated and promoted the industrial development of their respective territories and have assisted in the electrification of industry.

125. Such complainant companies have also organized and developed large staffs of trained employes to collect data respecting the industrial advantages of their respective territories, to utilize this information in publicizing and advertising such advantages, and to promote the development of new industries in the areas served by them. As a result of these activities, such companies have assisted in locating many new industrial plants in the areas which they serve, representing an investment of many millions of dollars and the employment of thousands of workers. These new industries now constitute a very substantial part of the industrial power consumption served by such complainant companies.

126. Such complainant companies early began activities to develop and enlarge the residential use of electricity through extensive campaigns, fostering residential electrification and sale of domestic appliances. These activities have resulted in a large and progressive increase in the sale and use of electric appliances within the area served by such complainant companies. In carrying on this work of promoting domestic use of electricity, such complainant

companies have developed and now maintain extensive sales and service departments.

127. Such complainant companies have also made intensive studies of the problems and advantages of rural electrification; have constructed experimental rural lines as early as 1920; and since that time have been engaged in extensive activities in the development of rural electrification. These activities include educational programs showing the profitable use of electricity in agriculture, extensive experiments developing new uses of electricity on the farm, and constant investigation of possible rural line extensions into areas not yet served. In carrying out these activities the companies maintain large staffs of agricultural engineers, home economists, and salesmen. As a result of these activities a better understanding of the use of electricity on the farm has been brought about, which has resulted in the construction by the companies of thousands of miles of rural lines serving thousands of farmers, and in bringing electric service to hundreds of unserved rural communities.

128. In the case of the larger complainant companies, which do not serve exclusively in metropolitan areas, each of such companies maintains a large field organization under the charge of district managers. The field organization under each district manager is departmentalized to correspond with the departments in the central-office organization. Each of such district organizations has local offices responsible to the district manager. These local and division organizations cooperate with the central-office organization in the company's activities in their respective territories.

129. The complainant companies as a group have developed to a high degree system planning. This involves an intimate contact and thorough knowledge of the operating history of the power system, both physical and economic; of plans of expansion both immediate and prospective of all major industrial users; of the growth of merchandise sales in domestic and commercial fields; of the expansion of rural service; and of experiences gained in the operation and development of production and transmission facilities.

[fol. 887] 130. The rates and services of each of the complainant companies in the States of Alabama, Tennessee,

Kentucky, Georgia, Virginia, West Virginia, North Carolina, and South Carolina are regulated by State commissions in the respective States. There is no State Commission in Mississippi, and the rates and services of the complainant companies in that State are regulated by municipalities within their corporate limits. The rates charged by the complainant companies have been reduced and changed from time to time by order of the governing State commission. The rates charged by the several complainant companies in the States of Alabama, Tennessee, Georgia, Virginia, North Carolina, and South Carolina are uniform for the different classes of service throughout their respective operating territories under regulations imposed by the various State commissions.

131. The Public Utilities Commissions in the States of Tennessee, Alabama, West Virginia, and Kentucky have adopted regulations, applicable to certain of the complainant companies, fixing minimum requirements under which said companies may be required to extend their distribution facilities to give service to rural customers, or the commissions have the power to compel the companies to extend their lines anywhere in the area to take care of any business justifying such extension.

132. The Tennessee Valley Authority has not complied with the provisions of State laws applicable to public utility companies engaged in the electric-power business in any of the States where it is now operating and has not submitted to the regulation of the State commissions in any of such States.

[fol. 888] 133. The competitive activities of TVA in making it impossible for the complainant companies to reduce their fixed charges through refinancing and in making it impossible for them to procure new capital interfere with and limit the power of the State regulatory bodies to require the complainant companies to reduce their rates and extend or improve their facilities and service.

134. The carrying out of the Tennessee Valley program to take over the business and markets now served by the complainant companies will necessarily, in the case of such complainant companies whose business and markets are so taken, destroy their ability to maintain the organizations which they have developed, their ability to perform the func-

tions which they have heretofore and which they are now performing in providing adequate electric power service, and will destroy the ability of the States and political subdivisions in which such complainant companies are now operating to regulate and control the electric-power rates and service in such areas or to protect the economic needs represented by industrial, commercial, and domestic electric consumers who are now being served by such complainant companies.

135. The Rural Electrification Administration (REA), the Federal Emergency Administration of Public Works (PWA), and Electric Home and Farm Authority, Inc., and Electric Home and Farm Authority (EHFA) have cooperated with and assisted TVA in the furtherance of its power program.

(a) TVA has a "very cooperative arrangement" with [fol. 889] the Rural Electrification Administration (REA) for financing the construction of rural lines for municipalities and cooperatives; and among other things, representatives of REA have established offices in one of the TVA buildings in Knoxville, Tennessee; have attended organization meetings of cooperatives with representatives of TVA; have assisted in preparing petitions for incorporation of cooperative associations; have prepared by-laws for cooperative associations; have attended meetings of the board of directors of cooperatives and rendered advice concerning availability of REA funds; and TVA representatives have accompanied representatives of cooperatives to Washington to assist in the preparation of applications to REA for loans.

(b) The Federal Emergency Administration of Public Works (PWA) has made contracts or allotments for loans totaling \$7,053,575 and grants totaling \$7,629,383 to 23 municipalities in the States of Alabama, Mississippi, and Tennessee, in which complainant companies serve electricity, for the purpose of constructing a municipal electric distribution system to distribute TVA power in competition with the respective complainant company serving electricity therein.

(c) Many of the PWA applications are in form and substance identical and specifically recite in some instances [fol. 890] that the distribution system will duplicate and

supplant a privately owned distribution system; some recite that the amount of business contemplated and referred to therein is justified on the low promotional rates of TVA; some recite that the application is filed in cooperation with TVA to build up greater consumption of electrical energy; some recite that the application is filed to take advantage of rates offered by TVA; and with few exceptions all applications state that the electricity to be distributed will be purchased from TVA.

(d) The loan and grant applications of the cities of Hartselle, Russellville, Guntersville, and Tarrant City, Alabama, severally recite that the city has secured 10-year written contracts from practically all electric consumers in the city. The form of contract, which is incorporated in each application, is identical and provides that in consideration of \$1 paid by the mayor of each city to the signer of the contract and in further consideration of the opportunity to secure lower electric rates, the signer of the contract will purchase his entire requirements of electrical energy from the city for a period of 10 years if, as, and when the city has electrical energy for sale, provided the rates to be charged by the city shall be those prescribed by the Tennessee Valley Authority.

[fol. 891] (e) In the fall of 1933 the TVA Board granted Mr. Lilienthal the right to create a corporation under the laws of the State of Delaware with power to discount commercial paper to be obtained from manufacturers of electrical appliances licensed by the Authority. In December 1933 Electric Home and Farm Authority, Inc., was created by executive order of the President and was chartered under the laws of Delaware in January 1934. The Directors of TVA were the Directors of Electric Home and Farm Authority, Inc., and Mr. Lilienthal was president. That company made a contract with TVA as of July 1, 1934, whereby the purchasers of electric energy from the TVA might finance the purchase of electrical appliances through E. H. & F. A., Inc., and the TVA was to collect from such purchasers the monthly payments for such appliances and account therefor to E. H. & F. A., Inc. Electric Home and Farm Authority, Inc., was dissolved in August 1935, and a new corporation, Electric Home and Farm Authority, was organized under the laws of the District of Columbia at or about said date, which new corporation succeeded to all

the property, rights, and liabilities of the original company, E. H. & F. A., Inc. The contract of July 1, 1934, is still in effect and the present corporation, E. H. & F. A., and Tennessee Valley Authority are still carrying on under said contract.

136. If the projects of the Authority, described in find- [fol. 892] ing 39, had been in operation during past floods since 1897, they could have reduced the height of all major Mississippi floods since that date by 2 feet or more from Cairo, Illinois, at least to Helena, Arkansas. It is reasonable to expect that these projects will make possible a reduction similar in extent in all probable floods in the future on the lower Mississippi. Such reduction will provide substantial additional flood protection for the lower Mississippi, a substantial safety factor for the levee system, reduce the frequency of the use of floodways and the flooding of back-water areas, and will be of substantial value in the control of destructive floods in the lower Mississippi. There appears to be no system of reservoirs sufficient to eliminate the flood menace in the Tennessee basin except in combination with local protective works.

Gore, J., is further of the opinion that the conclusions of law are fully stated in the opinion and that therefore there is no reason for stating any conclusions of law separately.

(S.) Florence E. Allen, United States Circuit Judge.

(S.) John D. Martin, United States District Judge.

(S.) — — —, United States District Judge.

[fol. 893] IN UNITED STATES DISTRICT COURT

(Caption omitted)

NOTICE OF APPEAL—Filed February 23, 1938

To Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal:

You and each of you are hereby notified that the complainants in the above entitled cause will jointly appeal from the decree of the United States District Court for the Eastern District of Tennessee, Northern Division, entered in said cause the 25th day of January, 1938, to the Supreme

Court of the United States as provided by the applicable statutes of the United States and rules of said Supreme Court.

This 23rd day of February, 1938.

Trabue, Hume & Armistead, Frantz, McConnell & Seymour, Baker, Hostetler, Sidlo & Patterson, Solicitors for Complainants.

The undersigned, being one of the solicitors of record for Tennessee Valley Authority, Arthur E. Morgan, Harcourt A. Morgan and David E. Lilienthal, acknowledges services of the foregoing notice this 23rd day of February, 1938.

(S.) William C. Fitts, Jr.

[fol. 894] IN UNITED STATES DISTRICT COURT

(Caption omitted)

PETITION FOR APPEAL—Filed February 24, 1938

Now come The Tennessee Electric Power Company, Franklin Power & Light Company, Memphis Power & Light Company, Southern Tennessee Power Company, Birmingham Electric Company, Mississippi Power Company, Appalachian Electric Power Company, Carolina Power & Light Company, Tennessee Public Service Company, Holston River Electric Company, Alabama Power Company, Kentucky & West Virginia Power Company, Inc., Kingsport Utilities, Incorporated, Kentucky-Tennessee Light & Power Co., West Tennessee Power & Light Company, Mississippi Power & Light Company, East Tennessee Light & Power Company, and Tennessee Eastern Electric Company, (the Georgia Power Company, one of the original complainants, having been dismissed without prejudice) and respectfully represent that a final decree of the District Court of the United States for the Eastern District of Tennessee, Northern Division (a three judge court organized pursuant to 28 U. S. C. 380A) was entered in the above entitled cause on the 25th day of January, 1938, denying each and all of petitioners' prayers for relief and dismissing their Bill of Complaint upon the stated ground that "no cause of action has been established and that the suit should be dismissed."

Petitioners appeal from the denial of each of their prayers for relief, as specified in their Bill of Complaint as amended, and appeal from the whole of such decree dismissing their Bill and denying any relief,—all upon the grounds and for the reasons particularly stated in the Assignments of Error presented herewith.

Wherefore, your petitioners, being so aggrieved, respectfully pray that this appeal be allowed; that a proper order [fol. 895] touching the security required of them to be made; that citation be issued according to law, and that a transcript, duly certified, of the record and proceedings upon which such decree was based be sent by the Clerk of the District Court to the Supreme Court of the United States, under the rules of the Supreme Court in such case provided.

Charles C. Trabue, Charles M. Seymour, Raymond T. Jackson, Solicitors for Petitioners. Trabue, Hume & Armistead, Frantz, McConnell & Seymour, Baker, Hostetler, Sidlo & Patterson, of Counsel for Petitioners.

Dated February 24th, 1938.

Appeal allowed and security for costs on appeal fixed in the sum of \$500.00.

Florence E. Allen, United States Circuit Judge.

[fol. 896] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ASSIGNMENT OF ERRORS—Filed February 24, 1938

Now come the complainants and assign as errors the action of the District Court in the following particulars:

I

Complainants assign error to rulings made by the District Court in the conduct of the trial upon evidence and upon matters of procedure and practice and allege that said court erred:

1. In denying complainants' motion (filed September 20, 1937) in advance of trial for the production of data showing the design, size and method of operation of the dams and

reservoirs constructed, under construction or to be constructed by Tennessee Valley Authority (hereinafter referred to as TVA) and for the production of other like data and records.

2. In refusing to issue a subpoena duces tecum (Complainants' Exhibit No. 1), at the outset of the trial (a) for the production of corporate minutes of TVA of certain specified dates relating to its operations, plans, activities, objectives and program for the generation, transmission, distribution or sale of electric energy; (b) for the production of all corporate minutes of TVA relating to its power operations, plans, objectives and program, including all consideration of rates, consideration of contracts, consideration of construction, operation, purchase or sale of electric transmission or distribution facilities, and consideration of methods of operations and policies for the conduct of the TVA power business; (c) for the production of certain designated correspondence with municipalities now [fol. 897] being served by complainants and with Federal Emergency Administration of Public Works (hereinafter referred to as PWA) and Rural Electrification Administration (hereinafter referred to as REA) relating to the establishment of public distribution systems to distribute TVA power, the financing of municipal and rural distribution facilities to distribute TVA power, the extension of TVA service and the substitution of such service for existing service by any of the complainants; (d) for the production of TVA books and records relating to TVA activities and expenditures in promoting and advertising said defendants' power business and operations; and (e) for records showing the direction and supervision by TVA of the operation of municipal and cooperative distribution systems through which TVA electricity is distributed.

3. In ruling, in connection with the cross-examination of the complainants' witnesses Guild, Sweatt, Ford, Wisdom, Longley and Scholz, that the Court would permit cross-examination upon matters not connected with the examination in chief of the witness without making the witness as to such matters the witness of the cross-examiner, and in holding that such rule would apply to every witness thereafter called by either of the parties, the effect of which was to prevent complainants from calling any of the defendant directors or any employee of TVA or other hostile witness

as complainants' witness for limited examination on a particular subject or transaction.

4. In excluding from evidence the officially authorized and published statements of the TVA power policy and the TVA [fol. 898] power program issued to the press by TVA August 25, 1933 (Complainants' Exhibit No. 633) by which complainants sought to prove the objects, purposes and plans of TVA, which defendants were and are now executing and threatening to execute, as set forth in the bill of complaint.

5. In refusing to require the defendants to produce (a) certain TVA corporate minutes specified by dates, for the production of which a subpoena had been requested, relating to TVA's power policy and program and relating to its activities and proposed activities in the conduct of its electric operations and business, and (b) all TVA corporate minutes, for the production of which a subpoena had been requested, relating to the subjects specified in this assignment.

6. In excluding from evidence TVA corporate minutes attached to the defendants' answer (Complainants' Exhibits Nos. 701 to 720, inclusive) relating to the manner and extent of TVA's existing and planned power operations, error being assigned separately to the exclusion of each of said exhibits.

7. In ruling that statements of the defendants made before Committees of the Congress and in the First TVA Annual Report (Complainants' Exhibits Nos. 108, 109, 112, 113, 114, 115, 116, 364, 365 and 366) and offered as admissions of defendants were not admissible without offering the entire testimony of said defendants before said Committees and without offering the entire Report, including self-serving statements and declarations dealing with matters not related to or explanatory of such admissions by [fol. 899] which complainants sought to show that the primary purpose and object of the defendants was the construction and operation of a huge electric utility, the acquisition of markets of complainants for TVA power, the fostering of public ownership of electric distribution facilities and the yardstick regulation of rates of privately owned utilities including complainants, error being assigned separately to each of said rulings.

8. In excluding from evidence press releases, (Complainants' Exhibits Nos. 634 and 779 to 902, inclusive) error being assigned separately to the exclusion of each of said exhibits, each of which was officially authorized, issued and published by TVA as a part of and in performance of the public duties claimed by defendants to be imposed by the TVA Act to develop TVA's power business and regulate local electric rates, the authenticity of which was admitted and which were offered by complainants as illustrative of the advertising and publicity carried on by TVA for over four years in promoting its power business and as admissions by the defendants of the truth of the facts stated and showing in substance and being offered to show:

(a) The wholesale, retail and industrial rates adopted and published by TVA applicable to all classes of consumers of TVA power;

(b) The progressive development of the TVA generating, transmission and distribution system;

(c) The intent of TVA to construct and operate a vast Federal electric utility system to serve the markets in which the complainant companies are now serving and offering electric service;

(d) The intent of TVA to regulate the local rates charged [fol. 900] by other electric utilities, including complainants, operating in the area;

(e) The assertions by TVA that its rates include all proper costs and that the rates of its competitors are based upon improper capital write-ups, thereby representing that the rates of complainants are unreasonable;

(f) The assertions by TVA that the rates and practices of existing utilities, including complainants, are unreasonable and unfair, with the necessary and intended effect of destroying the good will of complainants and promoting TVA power business;

(g) The solicitation of business, in areas served by complainants, by advertising the availability of TVA power, by advertising the availability of public funds through PWA, REA and other agencies to finance distribution systems for sale of TVA power, and by advertising the economies and savings to be secured by purchasers of TVA power;

(h) The threat and damage to the complainants and each of them from repeated announcements by defendants of their intended acts; and

(i) The refusal of TVA to submit to State laws or regulations in the conduct of its power business.

9. In excluding from evidence advertising publications widely distributed by TVA (Complainants' Exhibits Nos. 187, 189, 190 and 635) publicizing TVA's power activities, rates, business and plans for extension of its power system, error being assigned separately to the exclusion of each of said exhibits.

10. In excluding statements and admissions made by the defendant Lilienthal appearing in his official capacity as a representative of TVA before the Committee on Interstate and Foreign-Commerce of the House of Representatives, 74th Congress, 1st Session (Complainants' Exhibit No. 364), [fol. 901] relating to the methods and practices of TVA in promoting and advertising its power business, in areas served by complainants, through press releases and other publicity means.

11. In excluding the testimony of the witnesses Stanley, Lamar, Woodall, Burleson, McWhorter, Bass, Armington, Gause, Kittredge, Mastin and Mauldin, all relating to speeches and statements made at meetings by TVA directors or representatives, by which complainants offered to show both the activities of TVA in promoting its power business in areas served by complainants and admission against interest on the part of such representatives with respect to TVA power activities, plans and facilities, error being assigned separately to each of said rulings.

12. In excluding a memorandum (Complainants' Exhibit No. 682) produced by the witness Hobson, General Manager of Electric Home & Farm Authority (hereafter called "EH&FA"), as compiled from the books and records of said EH&FA as of June 30, 1937, showing that TVA on said date was regularly making without charge collections from its electric customers on conditional sales contracts purchased by EH&FA from 42 dealers in 19 towns under the EH&FA financing plan; also in excluding published advertising material and press releases of said EH&FA or its predecessor corporation, Electric Home & Farm Authority, Inc., and correspondence with TVA (Complain-

ants' Exhibits Nos. 648 and 650-681, inclusive), by all of which complainants offered to show the activities of Electric Home & Farm Authority, its said predecessor corporation and TVA, in jointly promoting a market for the sale of electricity by TVA, error being assigned separately to the exclusion of each of said exhibits.

[fol. 902] 13. In excluding testimony of the witnesses Longley and Stanley and tabular comparisons between TVA rates and complainants' rates (Complainants' Exhibits Nos. 192 and 198) by which complainants offered to prove the difference between the rates of complainants and the lower rates established by TVA in the various classes of service and thereby to show the regulation of complainants' rates by TVA and the extent and imminence of damages to complainants' businesses, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

14. In excluding the testimony and tabular exhibits (Complainants' Exhibits Nos. 504, 505 and 506) of the witness Moreland by which complainants offered to prove that the so-called "yardstick rates" promulgated and established by TVA are below actual cost by reason of improper accounting and various subsidies, and that upon completion of the projects included in the current construction program of TVA (the TVA Unified Plan) and their capacity operation at full normal loading, the TVA rates will result in an annual deficit of not less than \$9,000,000 and that, taking into account items of expense, such as taxes, which would have to be borne by a privately owned utility, the annual deficit would be much greater, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

15. In refusing to require the defendants to produce under subpoena duly requested (a) TVA corporate minutes of specified dates, relating to consideration, approval or adoption of rates for the sale of electricity, and (b) all TVA [fol. 903] corporate minutes relating to the aforesaid subjects, by all of which complainants expected to show that such rates were not fixed upon the basis of cost.

16. In excluding testimony of the witnesses Stanley, Leferson, Newton and Moreland by which complainants sought to show that, by reason of the large quantities of power to

be produced and marketed by TVA in relation to the consumption in the territory within which such power must find a market, and by reason of the characteristics and economics of the power business, and by reason of the methods of operation and the schedule of rates adopted by TVA, TVA rates will control, regulate, measure, fix and determine the rates of private utilities including complainants at the level established by TVA, and that such control and regulation will completely supersede and nullify State regulation of all electric power rates, error being assigned separately to each of said rulings.

17. In excluding a memorandum (Complainants' Exhibit No. 339), used by a TVA representative in soliciting the business of the Yates Bleachery Company, showing the amount of annual savings under TVA rates which said Company would secure as against purchasing power from complainant, The Tennessee Electric Power Company.

18. In excluding testimony of the witnesses Newton and Moreland and a tabulation (Complainants' Exhibit No. 514), by which complainants offered to prove the damage from loss of revenue which would result to the several complainants by TVA rate regulation and, more particularly, [fol. 904] that the application of TVA rates to the business of all of the complainants, after making allowance for increased customer consumption resulting from rate reductions, would result in an annual gross revenue loss of \$21,000,000 and in addition an increased annual operating cost of \$5,000,000, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

19. In excluding the testimony and tabulations (Complainants' Exhibits Nos. 512 and 513) of the witness Moreland, by which complainants sought to prove that great damage will result to complainants from their facilities being rendered idle through the execution of the present TVA program, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

20. In excluding the testimony of the witnesses Robinson and Addinsell and financial charts (Complainants' Exhibits Nos. 487 to 496, inclusive), by which complainants offered to prove that since the creation and the commencement of operations of TVA and as a result thereof the complainants,

with one exception have sustained an impairment of credit possessed by them and have been unable to borrow money or secure new capital upon favorable terms either for the purpose of financing extensions and improvements or for the purpose of refunding; that except for TVA competition such companies would have been able to effect large savings in their fixed charges by refunding operations at lower interest rates; and that ability to secure credit upon reasonable terms is essential to the electric utility business, and that the destruction thereof substantially interferes with State regulation of both rates and service and specifically [fol. 905] prevents State regulatory bodies from reducing rates by reason of savings achieved through refinancing or financing extensions, on favorable terms, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

21. In excluding testimony of the witness Willkie, by which complainants offered to show the nature and extent of the efforts made by some of the complainants to protect their markets and minimize their damages by absorbing the power generated by TVA and to that end offering to purchase such power at rates to be determined by arbitration, or at rates to be fixed by competitive bidding, or, after the promulgation of the TVA wholesale rate, at the rate prescribed by TVA, and to distribute said power widely and pass all resulting savings on to consumers.

22. In excluding testimony of the witness Barry by which complainants offered to show that the acts of the defendants in taking over all or any substantial part of the market for electricity served by complainant Alabama Power Company within a 250, 150 or 100 mile radius of the hydro plants of the TVA in northern Alabama would substantially depress the value at which the United States may acquire Mitchell, Martin and Jordan Dams at the end of the periods specified in the licenses issued to the Alabama Power Company by the Federal Power Commission for the construction of said dams; and in excluding the testimony of the witness Yoder by which complainants offered to show that the acts of the defendants in taking over all or any substantial part of the market for electricity served by complainant Carolina Power & Light Company within a 250, 150 or 100 mile radius of the [fol. 906] hydro plants of TVA in eastern Tennessee and North Carolina would substantially depress the value at

which the United States can acquire the Waterville Dam and hydro plant at the end of the periods specified in the license issued to the Carolina Power & Light Company by the Federal Power Commission for the construction of said project, error being assigned separately to each of said rulings.

23. In excluding Complainants' Exhibits Nos. 629 to 632, inclusive, relating to the cost of navigation facilities required to be provided by the licensee Alabama Power Company at its dams referred to in Assignment 22, *supra*, error being assigned separately to the exclusion of each of said exhibits.

24. In excluding the testimony of the witness Street and a TVA questionnaire (Complainants' Exhibit No. 204) by which complainants sought to prove that TVA, as one of its activities in soliciting the business of complainants' customers, circularized municipalities, including those served by some of complainants, to secure information respecting consumption of electricity therein, the extent and quality of existing service and other like data, error being assigned separately to said ruling and to the exclusion of said exhibit.

25. In refusing to require TVA to produce, for which a subpoena had been requested (Complainants' Exhibit No. 691) surveys made of the business and customers of any of the complainants by TVA or by any individual, corporation, association or agency, public or private, and furnished to TVA as part of TVA's activities in soliciting business of customers of complainants.

[fol. 907] 26. In excluding from evidence the testimony of the witness Stanley and letters received by complainants from their customers (Complainants' Exhibits Nos. 194, 195, 200, 201, 202 and 212) by which complainants sought to show that the reasons stated by their customers for discontinuing service were to take TVA service at lower rates, to show threats by municipalities now served by complainants to substitute TVA electricity unless rates should be reduced to the level of TVA rates, and to show the adverse effect upon the complainants' customer relations, good will and businesses resulting from the TVA power program and the continuing execution thereof by the defendants, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

27. In refusing to require TVA to produce, for which subpoenas had been requested (Complainants' Exhibits Nos. 690, 691 and 693 to 697, inclusive), its correspondence with municipalities, county agents or with other Federal agencies, having to do with the supplying of TVA electricity in such municipalities or in rural areas and the promotion of the TVA power business, or having to do with the construction or purchase of transmission or distribution facilities for said purposes; or with the securing of loans or grants of Federal funds for said purposes, by which complainants sought to show the aggressive campaign of TVA to extend its power business and to acquire the markets of complainants, and the confederation between TVA and PWA to compel existing utilities, including complainants, to sell their distribution systems at inadequate prices fixed by TVA, error being assigned separately to each of said rulings.

[fol. 908] 28. In refusing to require defendants to produce, for which a subpoena had been requested (Complainants' Exhibit 690), a copy of letter from defendant Lilienthal to Mayor Overton of Memphis in which it was stated that TVA contemplated purchasing certain electric facilities of complainant, Memphis Power & Light Company, including its steam electric generating plant which, the said letter stated, would be used by TVA as a standby plant for the service of Memphis.

29. In excluding the testimony of the witness Woodall and a form of contract (Complainants' Exhibit No. 377) by which complainants sought to prove that TVA representatives have recommended to municipal officials circularization of contracts providing that signers, then customers of complainants, should purchase all their electric requirements for the next ten years at TVA rates as a means of promoting public ownership and the sale of TVA power, error being assigned separately to said ruling and to the exclusion of said exhibit.

30. In excluding the testimony of the witnesses Stanley, Street, Green and Burleson and forms of contracts (Complainants' Exhibits Nos. 193, 197 and 203) by which complainants sought to prove that contracts similar to the contract described in Assignment No. 29 for the purchase of TVA electricity or electricity at TVA rates were circularized in certain municipalities in which complainants ren-

dered service, and had been signed by customers of complainants, error being assigned separately to each of said rulings and to the exclusion of each of said exhibits.

[fol. 909] 31. In excluding letters between TVA and PWA, PWA reports and memoranda in regard to particular PWA electric distribution projects in the TVA area, PWA press releases and other documents (Complainants' Exhibits Nos. 418, 428, 429, 446 to 450, 461 to 466, 469, 480 to 483, and 637 to 647) by which complainants offered to show the National Power Policy of the Federal Government to reduce electric rates and promote public ownership and to show the cooperation between TVA and PWA in furtherance of said National Power Policy and in furtherance of the TVA power business, error being assigned separately to the exclusion of each of said exhibits.

32. In overruling successive motions filed by complainants in advance of trial and during the trial for leave to take the deposition of Harold L. Ickes, Administrator of the PWA, to show the cooperation and concert of action between the defendants and said Ickes as such Administrator in fostering the public ownership of electric distribution systems and in promoting the TVA power business, and further, for the purpose of showing the cooperation of these two agencies in seeking to compel complainant companies to sell their distribution systems at distress prices, error being assigned separately to the ruling on each of said motions.

33. In excluding exhibits to defendants' answer, offered by complainants (Complainants' Exhibits Nos. 770 to 773, inclusive) consisting of correspondence between TVA and PWA, tending to establish the cooperation between PWA [fol. 910] and TVA to acquire the business of complainants for TVA, error being assigned separately to the exclusion of each of said exhibits.

34. In excluding the testimony of the witness Smith by which complainants offered to prove the subsidies extended by TVA to its municipal customers in providing without charge accounting, promotional, advertising and other services and to show further the control and domination by TVA of such municipal operations.

35. In excluding a part of the deposition of the witness Pittman and the entire deposition of the witness Bandy by

which complainants sought to show that rural cooperative associations operating under TVA contracts are dominated, controlled and managed by TVA and are not independent agencies, error being assigned separately to each of said rulings.

36. In excluding the depositions of the witnesses Armington, Gause and Kittredge and a stenographic transcript of the organization meeting (Complainants' Exhibit No. 390) by which complainants offered to prove activities of TVA in instigating, supervising and directing the organization of rural cooperatives to distribute TVA power, including the supplying of forms for making surveys and supervisors to assist with such surveys, and the activities of REA in assisting TVA in the promotion as well as financing of such cooperatives in areas served by complainants, error being assigned separately to each of said rulings and the exclusion of said exhibit.

[fol. 911] 37. In refusing to require TVA to produce, a subpoena for which had been requested, a copy of forms of bulletins, circular letters or instruction or information sheets having to do with the method of operation, rates or policies of any municipality or cooperative association engaged in distributing TVA power, by which complainants expected to prove that TVA initiated, dominated and controlled such cooperatives in the area served by complainants.

38. In refusing to require TVA to produce, a subpoena for which had been requested (Complainants' Exhibit No. 693), its correspondence with REA from 1935 to date having to do with the organization, financing or construction of lines for rural cooperative associations, by which complainants expected to prove that REA and TVA confederated to establish cooperatives with Federal funds in the areas served by complainants in furtherance of the TVA power business.

39. In excluding letters between TVA and REA, REA press releases, and letters and reports between REA and electric membership corporations with reference to specific REA projects in the TVA area (Complainants' Exhibits Nos. 683 to 685, inclusive), by which complainants offered to prove the cooperation between TVA and REA in the promotion of non-profit electric membership corporations

to distribute TVA power, error being assigned separately to the exclusion of each of said exhibits.

[fol. 912] 40. In excluding the testimony of the witness Collier, maps (Complainants' Exhibit Nos. 329, 330, 332, 333 and 335), and a tabular statement (Complainants' Exhibit 331), by which complainants sought to complete their showing of the size and scope of the TVA power system and business, and to show the extent of the existing market in the State of Georgia and the fact that such market is now being adequately served, and that all of the municipal and industrial customers, represented by TVA in its 1937 report to the Appropriations Committee of Congress as prospective TVA customers to be served by a proposed high tension transmission loop from Chattanooga, Tennessee, to Cartersville and Cave Springs, Georgia, have been for many years customers of the Georgia Power Company, a non-complainant, and are now being served by it under unexpired long term contracts, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

41. In excluding the testimony of the witness Eaton and executive messages of the Governor of Tennessee (Complainants' Exhibits Nos. 686 and 687), by which complainants offered to prove that State laws, authorizing the formation of rural cooperative associations, authorizing such associations and municipalities to contract with TVA, authorizing the borrowing of money from PWA and REA for the purpose of engaging in the power business, and other similar laws, were prepared jointly by attorneys representing TVA, PWA and REA, and were sponsored by TVA representatives, in furtherance of the TVA power business in areas served by Complainants, error being assigned separately to each of said rulings and the exclusion of each of said exhibits.

[fol. 913] 42. In refusing to require TVA to produce, a subpoena for which had been requested (Complainants' Exhibit No. 497), a telegram from TVA to the Governor of Alabama dated January, 1935, setting forth verbatim special legislation to be passed in Alabama in the interest of TVA operations in said State.

43. In excluding the testimony of the witness McWhorter and a copy of a resolution of the City of Moulton, Ala-

bama (Complainants' Exhibit No. 498) by which complainants sought to prove TVA's activities in promoting the sale of TVA electricity through cooperatives to customers of complainants, error being assigned separately to said ruling and to the exclusion of said exhibit.

44. In refusing to require defendants to produce, a subpoena for which had been requested (Complainants' Exhibit No. 694), a copy of the public address made by defendant Lilienthal in Knoxville on or about November 17, 1933, or a copy of the report thereof sent to newspapers, in which it was stated that the dams that TVA was then constructing and proposing to construct were power dams and were being built because they would produce electric power.

45. In refusing to require defendants to produce, a subpoena for which had been requested (Complainants' Exhibit No. 692), correspondence in August and September, 1933, between defendants and the Honorable Hugo L. Black, then United States Senator from the State of Alabama, tending to show in connection with other testimony offered by complainants, that the primary purpose of TVA [fol. 914] in the construction of Wheeler and other TVA dams was the generation of electric power.

46. In excluding the statement of Major General Lytle Brown, then Chief of Engineers, United States Army, contained in the report of Hearings before the Military Affairs Committee of the House of Representatives, 72nd Congress, First Session, that the construction of a dam at Cove Creek (site of Norris Dam) would not be justified for navigation or flood control.

47. In refusing to require the production, or permit the use in cross-examination, of a report from the United States Department of the Interior, Bureau of Reclamation, to TVA, under date of November 1, 1935, embodying a study of the economic height of Norris Dam for flood control and power, and stating that such dam, which as actually constructed cost approximately \$36,000,000, could be constructed for flood control alone for approximately \$7,000,000, and in refusing to permit a copy of such report, although in the possession of TVA, to be filed as an exhibit for identification for the purpose of showing the preju-

dicial character of the Court's ruling, error being assigned separately to each of said rulings.

48. In excluding the testimony of the witnesses Davis, Kenney, Sharp, Alsobrook, Culbert, Kennemer, Chandler, Hennegar, Derrick, Robinson, and Jackson, by which complainants offered to prove that the annual value of agricultural crops on land that will be permanently flooded upon the completion of only the four TVA dams and reservoirs [fol. 915] at Chickamauga, Guntersville, Wheeler and Pickwick which have been built or are now under construction, is approximately twice the average annual damage caused by floods in the entire valley of the Tennessee River and its tributaries, error being assigned separately to each of said rulings.

49. In admitting in evidence over complainants' objections and without opportunity for cross-examination, self-serving declarations by or on behalf of defendants made to the Sub-Committee of the House Committee on Appropriations at its hearing in December, 1937 (Defendants' Exhibit No. 153) relating to navigation and flood control aspects of the TVA proposed dams and TVA's dealings with and treatment of privately owned utilities and methods of acquiring a market for the sale of its electricity.

50. In admitting in evidence, over complainants' objection, certain testimony of defendants' witnesses Okey and Barker, relating to floods and flood control, and Bowman, Woodward, Kimball, Floyd and Alldredge, relating to navigation or commerce, upon which subjects said witnesses were not qualified by training or experience to testify as expert or skilled witnesses, error being assigned separately to each of said rulings.

51. In permitting defendants' witnesses Brodie and Barker, over complainants' objection, to give opinion testimony of the comparative merits of the navigation channel resulting from the completion of the TVA high dam plan and that resulting from the low dam plan based upon an assumption that the low dam plan did not provide for overdepths beyond the nine foot depth, which was contrary [fol. 916] to the evidence concerning said plan and to the evidence of the practice of the Corps of Engineers in making similar stream improvements, error being assigned separately to each of said rulings.

52. In permitting, over objection of complainants, the defendants' witness Sargent to testify in his examination in chief as to the size, design, construction and operation of the Sacandaga Reservoir on Sacandaga River in the State of New York, to show by analogy that the TVA dams could be operated so as to produce power and provide flood control.

53. In refusing to permit complainants to cross-examine the defendants' witness Sargent with reference to the conflict between opinions expressed by him in his testimony and those expressed by defendants' witness Watkins on the same subject, as follows:

"Q. Well, then, you would not agree with Colonel Watkins, that if they were to release that storage in advance of the flood it would be detrimental downstream?

Mr. Fly: I object to cross examining this witness on Colonel Watkins' testimony in the Radford case. I think that is going entirely too far.

Mr. Jackson: That is the testimony in this case.

Judge Allen: The Court sustains the objection upon the ground that the question is personal. The Court will not permit questions to be asked which compare the testimony of various witnesses in the case.

Mr. Jackson: May we have our exception?"

[fol. 917] 54. In refusing to permit complainants to cross-examine defendants' witness Watkins with reference to the conflict between opinions expressed by him and those expressed by General George B. Pillsbury then Assistant Chief of Engineers on the same subject before the Committee on Military Affairs of the House of Representatives, as follows:

"Colonel, I direct your attention to the testimony of General Pillsbury, at the hearings before the Committee on Military Affairs, House of Representatives, 74th Congress, First Session, on page 302 as follows:

Mr. Fly: I object right now. It is just another way of getting hearsay before this Court.

Judge Allen: Just a minute. In what capacity was General Pillsbury appearing?

Mr. R. T. Jackson: He was appearing in his official capacity before the Committee to advise the Congress under

his oath of office, which, as I understand it, makes his statements perfectly competent in any court.

Judge Allen: The objection is sustained. You may have your exception.

Mr. R. T. Jackson: May I complete the sentence or question for the purpose of having the record show what the question is?

Judge Allen: How long is it?

Mr. Jackson: What I want to read is 3½ lines.

Judge Allen: Yes.

Mr. Jackson: Carrying on to the other question: 'General Pillsbury: Yes—Oh yes, high dams'—this is with relation to the Tennessee Valley Authority,—'are very much more costly than the low ones. They are not better for navigation, but the justification for their large expenditure can be found only in the power that they make available.' That is the end of the quotation. And I ask you whether or not you agree with the opinion of General Pillsbury. Now, the Court sustains the objection to that question and I ask that our exception be noted."

55. In refusing to permit complainants to cross-examine the defendants' witness Bowman with reference to the conflict between opinions expressed by him and those expressed by General George B. Pillsbury, then Assistant Chief of Engineers on the same subject given as a witness for the Tennessee Valley Authority in the case of Ashwander v. Tennessee Valley Authority, and refusing to permit the question to appear in the record for the purpose of showing the prejudicial character of the ruling, as follows:

[fol. 918] "Q. You testified as to your knowledge about the difficulties of building high dams after low dams had been constructed. I invite your attention to this statement of General Pillsbury, who is a very eminent navigation engineer, is he not?

A. Yes, sir.

Mr. Fly: I object to any cross-examination on General Pillsbury's statement.

Judge Allen: The objection is sustained. The Court adheres to its ruling in that particular. You may have your exception.

Mr. Jackson: May we have our exception, and may I have my question appear in the record, so that I can show what is sought to be elicited?

Judge Allen: The record may show that Mr. Jackson desired to read from the witness testimony of General Pillsbury—

Mr. Jackson: Who they testified is an eminent navigation engineer.

Judge Allen (continuing): —who is not here and is not a party to this case, and the Court holds this is not competent examination. You may have your exception.

Mr. R. T. Jackson: And we are not permitted to show the statement which we wish to confront the witness with?

Judge Allen: You are not permitted to read into the record the testimony of General Pillsbury in another case, and you have your exception to that statement. The Court is desirous of going forward with this case. We are required by statute to expedite the case. We have made our ruling and it stands."

56. In refusing to permit complainants to cross-examine defendants' witnesses with reference to conflicts between opinions expressed by them and opinions expressed on the same subjects by other defendant witnesses in this case or by witnesses produced by TVA in *Ashwander v. Tennessee Valley Authority* or by officers of the Corps of Engineers of the United States Army in testifying pursuant to their official duties before Committees of the Congress, as illustrated by assignments 53 to 55, *supra*.

57. In admitting, over complainants' objection, testimony elicited by defendants upon cross-examination of the witnesses Cowley and Hutchinson at the taking of their depositions and relating to matters outside the scope of their direct examination, to wit, the organization of the Lincoln County Electric Membership Corporation and the Middle Tennessee Electric Membership Corporation, error being [fol. 919] assigned separately to each of said rulings.

58. In permitting defendants' witnesses Woodward, Bowman, Kimball, Wessenauer and Barker to testify over complainants' objections respecting defendants' dam construction program, plans and designs for dams, practices and plans of operations and in receiving in evidence numerous exhibits identified by said witnesses purporting to show such information and data (Defendants' Exhibits Nos. 38 to 40, inclusive, 42 to 48, inclusive, 50, 52, 66, 87, 98 and 139) without any showing or competent proof that such plans,

designs, practices or plans of operation were ever officially adopted, approved or authorized by the board of directors of TVA, although said testimony and data were inconsistent with reports and statements that had been made by TVA or its directors to Congress, error being assigned separately to each of said rulings and the admission of each of said exhibits.

59. In refusing to issue a subpoena duces tecum (Complainants' Exhibit No. 954) or require the production of the TVA budget estimate submitted to the Appropriations Committee of the Congress December 13, 1937, admitted by defendants' witness Bowman and by defendants' counsel to contain data, respecting the design, height and operation of certain of TVA's proposed dams, inconsistent with testimony given by said witness on December 16, 1937.

60. In excluding the budget estimates of TVA (Complainants' Exhibit No. 926) submitted to Congress in December [fol. 920] 1937 stating the height of the TVA dams and area and storage capacity of the TVA reservoirs constructed and proposed to be constructed, by which complainants sought to show conflicts between the data in said report and testimony relating to the same subjects given by defendants' witnesses Bowman and Kimball in this case within a few days of the date said budget estimates were so submitted.

61. In excluding all rebuttal testimony involving any matter of opinion, offered by complainants through the witnesses Knappen, Minser, Justin, Creager and Putnam, to rebut certain opinion testimony given by defendants' witnesses Woodward, Sargent, Clemens, Watkins, Kimball, Wessenauer, Bowman, Okey and Barker, which related solely to matters of defense or had been based in whole or in part upon erroneous assumptions of fact or assumptions of fact at variance with previously published TVA reports and made or assumed for the first time in connection with the testimony of defendants' said witnesses in this case, or had been based upon incomplete and inaccurate technical data or fallacious statements or applications of engineering principles, or involved unfounded and fallacious criticisms of the opinions expressed by complainants' witnesses in chief. The subject matter of rebuttal testimony offered by complainants and excluded appears more

particularly in the following separate assignments of error numbered 61a to 61d, inclusive, error being assigned separately to each of said rulings.

61a. In excluding the testimony of the witness Knappen, offered on rebuttal, by which complainants offered to prove [fol. 921] that the effect of tributary reservoirs is too problematical to be relied upon for the protection of the Mississippi Valley against floods at Cairo and below, that the most feasible method of protecting the Mississippi Valley against floods is by increasing the elevation of the levees and by channel improvements and cutoffs in the Mississippi River, that the projected construction of the dams of the TVA in the manner and to the height testified to by defendants' witnesses and their operation as testified to by such witnesses can not be depended upon to effect any reduction of the flood crest stages at Cairo, or below, in every great flood, and would not average in any event more than nine inches, that seepage through levees will not be diminished in great floods by the reduction of flood stage resulting from the operation of the reservoirs constructed by the TVA and that operation for flood control requires release of flood water at bank full stage as soon as possible, by all of which complainants sought to controvert opinion testimony given by defendants' witnesses.

61b. In excluding the testimony of the witnesses Justin and Creager, offered on rebuttal, by which complainants offered to prove that the practice testified to by TVA witnesses respecting the operation of its reservoirs would result in the operation of such reservoirs primarily for power rather than flood control; that it is contrary to all sound principles of flood control to adopt any other practice than to keep reservoir capacity intended for flood control purposes empty at all times except at times of flood; that the seasonal method of filling identifies the TVA dams as power [fol. 922] dams; and that under sound engineering practice a dam designed for flood control would have a much greater dependable flood storage capacity than is provided at Norris Dam, by all of which complainants sought to controvert opinion testimony offered by defendants' witnesses.

61c. In excluding the testimony of the witness Minser, offered on rebuttal, by which complainants offered to prove that storms might occur in the summer months in the Ten-

nessee Valley area which would produce a rainfall averaging more than eleven inches over an area of 20,000 square miles for a period of from three to five days.

61d. In excluding the testimony of the witness Putnam, offered on rebuttal, by which complainants offered to prove that the criticisms made by defendants' witnesses of the low dam program (recommended by the Chief of Engineers, House Document No. 328, 71st Congress 2nd Session, Complainants' Exhibit 105, and adopted by Congress in the Rivers and Harbors Act of July 3, 1930) for developing navigation on the Tennessee River are unfounded and based upon erroneous assumptions of fact, conclusions and computations; that the opinions given by defendants' witnesses respecting the claimed advantages to navigation of the TVA system of high dams with large lakes and excessive over depths are unfounded and based upon erroneous assumptions of fact, conclusions and computations; that predictions of prospective traffic on the Tennessee River made by the defendants' witnesses are based upon incorrect data containing duplications; and that no substantial expenditure over and above the cost of said low dams on the Tennessee River can be justified as being for the benefit of navigation.

62. In denying complainants' motions to strike from the record testimony of defendants' witnesses constituting new matters which the court had denied complainants the right to rebut, which motions were directed to testimony of the revised height of Gilbertsville Dam, the storage capacity of Gilbertsville reservoir and method of operation of TVA reservoirs, which testimony was inconsistent with the defendants' statements to Congress both prior to and during the trial, error being assigned separately to the overruling of each of said motions.

63. In requiring, over complainants' objection, final argument upon the merits, presentation of requested finding of fact, and the filing of final briefs during the day following the conclusion of the taking of testimony.

64. In overruling complainants' motion to strike and disregard three briefs which were filed by defendants two days following the day of final argument without leave of Court and in violation of repeated rulings by the Court respecting the time for filing final briefs.

65. In failing to make findings of fact and conclusions of law thereon as required by equity rule 70½ and enter the same of record at or before the entering of its final decree dismissing the bill of complaint on January 25, 1938.

66. In making and entering, on the day before the final [fol. 924] day for taking appeal from the decree entered herein on January 25, 1938, an order in the form presented by the defendants, revising, rearranging and renumbering the findings of fact adopted by the Court in its order of January 24, 1938, and inserting therein argumentative headings requested by the defendants.

67. In that the foregoing rulings on matters of evidence and matters of procedure deprived complainants of a full and fair trial and constituted a denial to complainants of due process of law as a matter of procedure.

[fol. 925]

II.

Complainants assign error to the Findings of Fact made by the District Court,¹ grouping said Findings for the sake of brevity whenever said Findings contain a common error, but intending that the Assignments of Error shall be considered as applying to each Finding of Fact separately, and complainants allege that said court erred:

A

68. In making its Findings of Fact Nos. 1 to 27, inclusive, and 29 to 42 inclusive, (38 to 64, inclusive, 93 and 94),

¹Under date of January 24, 1938, the District Court made, entered and filed its purported Findings of Fact and Conclusions of Law by adopting by number, without setting them forth, certain Findings and Conclusions theretofore submitted by the respective parties. Under date of February 23, 1938, the Court purported to make and enter an order re-numbering and re-arranging its Findings of Fact and Conclusions of Law. In the within Assignments of Error the Court's Findings are designated by the numbers of the defendants' proposed Findings, by which the Court adopted and identified said Findings in its said order of January 24, and are also designated by parenthetical references to the new numbers given to said Findings by the Court in its order of February 23, 1938.

in so far and to the extent that said Findings of Fact, or any of them, find or imply that the TVA dams constructed under construction or recommended for construction are designed primarily for, are reasonably related to or are to be operated for, the improvement of navigation and the control of floods upon the Tennessee River or Mississippi River in that each of said Findings, to the extent above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

[fol. 926] 69. In making its Findings of Fact Nos. 15, 16, 17, 33 and 34, (52, 53, 54, 69 and 70), to the effect that the dams constructed, under construction, or authorized for construction or investigation by TVA will provide a navigation channel in the Tennessee River substantially superior to that which could be provided by any alternative method of navigation improvement and will provide substantial navigation improvements on a number of tributaries of said River; that said dams would provide a navigation channel in the Tennessee River substantially superior to the navigation channel which would be provided by the system of low dams recommended by the Chief of Engineers in House Document 328, 71st Congress, 2nd Session (Complainants' Exhibit No. 105), and adopted by Congress in the Rivers and Harbors Act of July 3, 1930; and that said dams would substantially improve navigation on the Mississippi River in the low water season in that each of said Findings, in the respects above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

70. In making its Finding of Fact No. 18, (55), to the effect that the United States Army Engineers are now replacing low dams with high dams with provision for the development of power, in that said Finding in that respect is not supported by the evidence and is contrary to the clear weight of the evidence.

71. In making its Findings of Fact Nos. 19 and 20, (56 and 57), in so far as said Findings of Fact find or imply that the construction of the TVA high dams on the Tennessee [fol. 927] River or the construction of the TVA tributary

dams are essential to or have any real, substantial or practical relation to the improvement of the Tennessee River for navigation or any of the benefits which might accrue from such improvement of the Tennessee River; in that said Findings in those respects are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

72. In making its Findings of Fact Nos. 2, 5, 23, 26, 29, 30, 32, 33 and 41, (39, 42, 60, 63, 65, 66, 68, 69 and 93), in so far and to the extent that said Findings of Fact or any of them find or imply that the TVA dams will substantially alleviate destructive floods in the Tennessee and Mississippi valleys; that each or any of the projects of TVA is designed for flood control; that reservoirs on the Tennessee River are necessary or effective to provide dependable flood control on the lower Mississippi; and that detention reservoirs on tributaries of the Tennessee River are of uncertain value for local Tennessee flood control, in that each of said Findings is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

73. In making its Finding of Fact No. 39, (75), to the effect that the TVA projects are designed primarily for the improvement of navigation and control of destructive flood waters and not for power, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

[fol. 928] 74. In making its Findings of Fact, Nos. 25 and 31, (62 and 67), in so far and to the extent that said Findings of Fact, or any of them, find or imply that the completion of the flood protection works now under construction and nearing completion on the lower Mississippi River are inadequate to pass the largest estimated probable flood or that the Mississippi River Commission or Chief of Engineers has recommended the construction of reservoirs on the tributaries of the Mississippi River as necessary or dependable for flood protection on the lower Mississippi River, in that each of said Findings is unsupported by the evidence and is contrary to the clear weight of the evidence, error being assigned to the making of each of said Findings.

75. In making its Findings of Fact Nos. 7, 8, 9, 10, 35, 36, 37, 38 and 40, and in supplementing Complainants' Proposed Finding VIII-E-36 (44, 45, 46, 47, 71, 72, 73, 74, 76 and 79), to the effect that the engineers of TVA have determined or prescribed an effective method of operation for the improvement of navigation and the control of destructive floods in the Tennessee or Mississippi River Valleys; that the method of operation contemplating the emptying of the reservoirs in advance and immediately after floods is inapplicable to the reservoirs in the TVA Unified Plan; that the completed Norris Dam has been or is being operated primarily for the purpose of providing a navigable channel in the Tennessee River of any given depth; or for the purpose of providing effective protection to the Tennessee Valley against probable destructive floods; that the proposed plan of operation will increase the value of Wilson Dam for [fol. 929] all purposes; and that the TVA projects which are completed and in operation are operated primarily for flood control, in that said Findings in the respects above stated are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

76. In making its Finding of Fact No. 27, (64), that the season of major floods in the Tennessee River basin is limited to the period from approximately the middle of December to about the first of April, that no major flood of record has occurred in the Tennessee basin outside this period, and that floods occurring outside the said season are of limited volume and duration, in that such Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

77. In making its Findings of Fact Nos. 1, 3, 6, 42 and 156, (38, 40, 43, 94 and 230), in so far and to the extent that said Findings, or any of them, find or imply that the Fontana Dam on the Little Tennessee River is not included in the current construction program of TVA, in that each of said Findings in that respect is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

78. In making its Finding of Fact No. 6, (43), as to the acre feet of flood control which is or will be provided by Gil-

bertsville, Pickwick, Wheeler, Gunter'sville, Chickamunga, Watts Bar, Coulter Shoals, Norris and Hiwassee Dams, or any of them, in that said Finding in that respect is not supported by the evidence and is contrary to the clear weight of the evidence.

[fol. 930] 79. In making its Findings of Fact Nos. 4, 31 and 34, (41, 67 and 70), in so far and to the extent that said Findings of Fact, or any of them, find or imply that the United States Army Engineers in House Document 328, 71st Congress 2nd Session Complainants' Exhibit No. 105), or otherwise, ever recommended the construction of high dams such as the TVA dams at their present and projected sites, or elsewhere, for the improvement of navigation on the Tennessee River, or reported that dams of such a character would be justified other than for the production of power, that said Army Engineers ever recommended in said House Document 328, or otherwise, the construction of high dams such as TVA is constructing and proposing to construct for flood control, or that the Congress in the Rivers and Harbor Act of 1930 ever adopted any recommendations contained in said House Document 328 other than the recommendations of the Chief of Engineers, or that the Mississippi River Commission or the Corps of Engineers of the War Department ever recommended the construction of dams and reservoirs, such as the TVA dams and reservoirs, as essential, necessary or dependable for the control of floods on the lower Mississippi River, in that said Findings, in the respects above stated, are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

80. In making its Finding of Fact No. 42, (94) in so far as said Finding finds or implies that upon the completion of the new scheduled construction program of TVA, the firm power capacity of the TVA hydro-electric system will be less than 660,000 kw. of continuous firm power, in that said Finding in that respect is not supported by the evidence and [fol. 931] is contrary to the clear weight of the evidence.

81. In making its Finding of Fact No. 61, (112), in so far as said Finding finds or implies that since the expiration of the contract of January 4, 1934, the transmission line owned by the Southern Tennessee Power Company has been used other than as an interconnecting line between the systems

of the Alabama Power Company and The Tennessee Electric Power Company in that said Finding to that extent is not supported by the evidence and is contrary to the clear weight of the evidence.

82. In making its Findings of Fact Nos. 68, 69, 70, 71, 73, 80, 101, 121, 124, 125 and 126, (135, 136, 137, 138, 140, 147, 173, 193, 198, 199, 200), in so far and to the extent that said Findings, or any of them, find or imply that the municipalities and cooperatives which have entered or propose to enter into the business of distributing TVA electric power, can or may carry on said business as an independent enterprise or without assistance or direction on the part of TVA, in that each of said Findings, to the extent above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

83. In making its Findings of Fact Nos. 75, 76, 77, 78 and 74, (142, 143, 144, 145 and 141), in so far and to the extent that said Findings, or any of them, find or imply that cooperative associations which have entered into the business or propose to enter into the business of distributing TVA power were formed upon the initiative of the residents of the various communities in which they are located and are [fol. 932] operated, that such cooperatives were organized without solicitation on the part of TVA, and that, in accepting the terms and conditions under which TVA contracts to sell electric power to such cooperatives, the cooperatives have done anything more than to go through the form of entering into agreements which were dictated, prepared and submitted by TVA, in that each of said Findings, to the extent above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

84. In making its purported Finding of Fact No. 93, (160), in so far and to the extent that said Finding finds as a fact or concludes as a matter of law that any of TVA's contracts for the sale of power reserves to TVA the right to limit or suspend its deliveries of power in order to engage in flood control operations, in that said Finding does not correctly set forth either the provisions of the TVA contracts referred to or the legal effect thereof.

35. In making its Finding of Fact No. 105, (177), that subsidiaries of Commonwealth & Southern Corporation and companies affiliated with the Electric Bond & Share Company own substantially all of the transmission lines and serve substantially all of the existing load centers in the area within a radius of 100 miles from each of the dams now under construction or completed, in that such Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

[fol. 933] 86. In making its Finding of Fact No. 109, (181), that the most economical use of the Authority's Dams for power supply requires interconnecting transmission lines similar to those constructed, under construction or authorized for construction by TVA in that said Finding is contrary to the clear weight of the evidence and in conflict with evidence erroneously excluded.

87. In making its Finding of Fact No. 112, (184), rejected by Judge Gore, that TVA high voltage transmission lines constructed, under construction and authorized by the Authority, do not constitute duplication of existing transmission facilities in the area but are useful and valuable additions to those facilities, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

88. In making its Finding of Fact No. 114, (186), that transmission lines substantially as constructed by TVA are essential for service to the customers now being served or under contract, and that such lines were constructed for service to TVA customers under contract and not for any strategic purpose of injuring or threatening complainants, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

89. In making its Findings of Fact Nos. 118 and 119, (190 and 191), to the extent that said Findings find or imply that advances made by TVA for construction of rural lines under so-called construction contracts between TVA [fol. 934] and cooperatives have been repaid in full and that some of the cooperatives and municipalities purchasing power from TVA have constructed many miles of rural lines without any aid or assistance, financial or otherwise, from TVA or any other Federal agency, in that such Find-

ings are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

90. In making its Findings of Fact No. 120, (192), in so far as said Finding finds that the high tension transmission lines and substations constructed by TVA are similar in character and function to the lines and substations purchased by TVA under the contract of January 4, in that said Finding in those respects is not supported by the evidence and is contrary to the clear weight of the evidence.

91. In making its Findings of Fact Nos. 134 and 142, (208 and 216), to the extent that said Findings find or imply that none of the industrial loads served by TVA in 1937 were previously served by any of the complainants, except the industrial customers in the ceded area in Alabama, and that none of the sales of power by TVA have displaced any existing load of complainants except in the ceded area, in that said Findings in those respects are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

92. In making its Finding of Fact No. 139, (213), in so far as it finds as a fact or concludes as a matter of law that [fol. 935] Commonwealth & Southern Corporation purchased from TVA any power as agent for Alabama Power Company, The Tennessee Electric Power Company, Mississippi Power Company and Georgia Power Company, or any of them, in that said Finding, to the extent specified, erroneously states the provisions of said contract and the legal effect thereof.

93. In making its Finding of Fact No. 140, (214), rejected by Judge Gore, that TVA has practiced no discrimination against complainant utility companies or other utility companies in the sale of power, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

94. In making its Finding of Fact No. 141, (215), that the power policy of TVA dated August 15, 1933, was never formally approved by the Board of Directors of the Authority nor ever put into action or followed, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

95. In making its Findings of Fact Nos. 143, 144 and 145, (217, 218 and 219), all of which were rejected by Judge Gore, in so far and to the extent that said Findings of Fact, or any of them, find or imply that TVA has not officially or otherwise encouraged and promoted public ownership of distribution systems and has not solicited business in municipalities through publicity or otherwise, in that each of said Findings, to the extent above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

[fol. 936] 96. In making its Finding of Fact No. 148, (222), which was rejected by Judge Gore, that TVA has made no effort to regulate the rates of its municipal or cooperative customers and has taken no action regarding such rates other than entering into the initial agreement establishing resale rates, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

97. In making its Findings of Fact Nos. 154 and 155, (228 and 229), rejected by Judge Gore, in so far as said Findings, or either of them, find that in marketing the power generated at its dams TVA has not engaged in any solicitation of customers or misrepresentation in procuring contracts with municipalities, cooperatives, or other purchasers of power, and that TVA has not acted and has not conspired with municipalities or other prospective purchasers of power, in that each of said Findings is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

98. In making its Finding of Fact No. 157, (231), that in 1939 and 1943 utilities within ready transmission distance of TVA's generating facilities will require additional generating capacity as specified therein, and that the several complainants and their affiliated companies will require additional capacity as specified therein, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

99. In making its Findings of Fact Nos. 160 and 161, [fol. 937] (234 and 235), in so far as said Findings find or imply that there are unserved potential markets for the

electric energy which may be generated by TVA, not involving any displacements of the existing loads of complainants, including new industries and unserved rural areas, and that there is little area-wide rural electrification supplied by complainants in the territory served by them, in that each of said Findings, to the extent above stated, is not supported by the evidence and is contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

100. In making its Findings of Fact Nos. 163 and 164, (237 and 238), in so far as said Findings, or either of them, find or imply that there is likely to be a power shortage in the area within transmission distance of the projects of TVA without the generating capacity of the TVA power system, in that said Findings, to that extent, are not supported by the evidence and are contrary to the clear weight of the evidence, error being assigned separately to the making of each of said Findings.

101. In making its Finding of Fact No. 174, (248), that the generating and transmission facilities of the complainants now devoted to service of municipalities may be devoted to serving the growth in other loads should there be any loss of load resulting from the carrying out of existing TVA contracts for supplying electric service in municipalities, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

102. In making its Finding of Fact No. 175, (249), which [fol. 938] was rejected by Judge Gore, that the injury to the complainants resulting from an extension of rural lines by TVA or municipalities or cooperatives using TVA power for the purpose of serving rural areas adjacent to the lines of the complainants would be negligible, in that said Finding is not supported by the evidence and is contrary to the clear weight of the evidence.

103. In making its Finding of Fact, not designated by number in the order of January 24, 1938, (No. 125 in the order of February 23, 1938), in so far as it finds that the record does not establish that complainants, or any of them, will have their business destroyed by, nor will become bankrupt because of TVA competition, in that such Finding is not supported by the evidence and is contrary to the clear

weight of the evidence and in that it is in conflict with evidence erroneously excluded.

B

104. In so far as the Court by its order of January 24, 1938, denied the Findings of Fact submitted by complainants.

105. In failing and refusing to make complainants' requested or proposed Findings of Fact numbered VII (29, 30); VII-A (1, 2); VIII-B (1); VIII-C (1); VIII-D (1, 11, 12, 13, 16, 17, 18, 19); VIII-E (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 29, 30, 32, 33, 34, 35); VIII-F (1, 2, 3, 5, 7, 8, 9, 10, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 57); VIII-G (1); IX-A (1, 2, 3, 4½); IX-B (5, 6); IX-C (7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 16¼, 16½); IX-D [fol. 939] (18, 21, 21½); X-A (3, 4); X-B (10); X-C (10, 11, 12, 13); X-D (14); X-E (20, 21, 22, 23); X-F (24, 25, 25½, 26, 26½, 27, 28); X-G (29, 30, 31, 32); XI (1, 2, 3, 4, 5, 6, 7, 8, 9, 9½, 10); XII (a, b, c, d, e); all of which were in accordance with the manifest weight of the evidence, error being assigned separately to the refusal to make each of said proposed or requested findings.

105a. In failing and refusing to find in accordance with the manifest weight of the evidence that the completion of the dams and reservoirs on the Tennessee River and its tributaries now constructed, under construction or planned by TVA, together with their appurtenant power houses and generating facilities, interconnected to form a huge power pool, will provide for the TVA power system an initial power installation of 697,000 kilowatts and an ultimate power installation of 1,922,000 kilowatts with a continuous firm power capacity of 660,000 kilowatts, and under the load factor of 60 percent prevailing in the area of present and planned TVA operations, will provide in a dry year a firm power capacity of 1,100,000 kilowatts and an annual firm energy output of 5,780,000,000 kilowatt-hours and 1,887,000,000 kilowatt-hours of secondary energy and will provide, in an average water year, a total available energy of 10,000,000,000 kilowatt-hours; and that the TVA power system will require and include a vast transmission system composed of from 12,000 to 15,000 miles of transmission lines blanketing the entire State of Tennessee and large

parts of the States of Mississippi, Alabama, Georgia, North Carolina, Virginia, West Virginia and Kentucky.

105b. In failing and refusing to find in accordance with the uncontroverted evidence that in 1936 the total amount [fol. 940] of electricity generated by public utilities for public use was only a little over 1,000,000,000 kilowatt-hours in the State of Tennessee, approximately 3,700,000,000 kilowatt-hours in the States of Tennessee, Alabama, and Mississippi, and about 9,300,000,000 kilowatt-hours in the States of Virginia, North Carolina, Georgia, Kentucky, Tennessee, Alabama and Mississippi being the seven States of which any part lies within the Tennessee River basin.

105c. In failing and refusing to find in accordance with the manifest weight of the evidence that in 1936 the total direct and indirect sales of all privately and publicly owned electric utilities other than TVA within a 100 mile radius of any of the dams presently constructed, under construction or planned by TVA was 3,661,000,000 kilowatt-hours and within a 150 mile radius of said dams 7,162,000,000 kilowatt-hours and that the territory now being served by each of the complainant companies lies wholly or in large part within a 150 mile radius of said TVA dams.

105d. In failing and refusing to make any finding of fact relating to regulation of complainants' rates and in failing and refusing to find in accordance with the clear weight of the evidence that upon the completion and operation of the dams and reservoirs on the Tennessee River and its tributaries now constructed, under construction or planned by TVA, together with their appurtenant power houses, generating facilities and transmission system, there will be regulation by TVA of the rates of all of the privately owned electric utilities now doing business in the area in which said TVA power system will make TVA power available for sale, including the rates of the complainant companies, at a level fixed and determined by TVA.

[fol. 941]

III

Complainants assign error to the Conclusions of Law made by the District Court,¹ grouping said Conclusions for

¹ The Court's Conclusions of Law bear the same numbers in the order entered on January 24, 1938 and in the order entered on February 23, 1938, except that the Con-

the sake of brevity when said Conclusions contain a common error, but intending that the Assignments of Error shall be considered as applying to each Conclusion of Law separately, and complainants allege that said court erred:

106. In making its Conclusion of Law No. 1, holding that the Tennessee Valley Authority Act is a valid exercise of the constitutional powers of Congress in that under the facts established in this record (a) said Act is not authorized by any power delegated to the Congress under the Federal Constitution and contravenes the Fifth, Ninth and Tenth Amendments of the Constitution, and (b) said Act delegates legislative power in contravention of Article I, Section 1, Article II, Section 8, Clauses 1, 2 and 18, and Article II, Section 1 of the Constitution of the United States.

107. In making its Conclusions of Law Nos. 2 and 3 holding in substance that the acts of the TVA and its directors complained of and established by the evidence are within the powers conferred upon them by the TVA Act, and that the portions of the statute granting such authority are within the constitutional powers of Congress, in that (a) some of the acts complained of and established by the evidence are not authorized by the terms of the Tennessee Valley Authority Act, and (b) such portions of the statute [fol. 942] as purport to authorize any of said acts are beyond the powers of the Federal Government under the Constitution and prohibited by the Fifth, Ninth and Tenth Amendments thereof, and constitute delegations of legislative power in contravention of Article I, Section 1, Article II, Section 8, Clauses 1, 2 and 18, and Article II, Section 1 of the Constitution of the United States, error being assigned separately to the making of each of said Conclusions.

108. In making its Conclusion of Law No. 13, holding that by the TVA Act Congress has created the TVA as an agency of the Federal Government, has expressly authorized it to construct each of the dams constructed, under construction or under investigation for construction on

clusion of Law unnumbered in the order of January 24, is No. 62 in the order of February 23 and in these Assignments of Error.

the Tennessee and its tributaries and has from time to time authorized the construction of each dam constructed or under construction by appropriate appropriation statutes, in that Congress has no constitutional power to create TVA or authorize the construction of said dams under the record in this case.

109. In making its Conclusions of Law Nos. 5, 10 and 12, holding that under the power to regulate and promote interstate commerce the Federal Government has the power to improve the navigable character of the Tennessee River by means of the construction of dams and reservoirs upon the Tennessee and its tributaries, to construct all dams in the Tennessee River and its tributaries that are reasonably related to the improvement of the navigable character of the Tennessee or any of its navigable tributaries, to authorize the construction of each of the dams constructed, under construction or under investigation for construction by TVA upon the Tennessee River and its tributaries and that the selection or determination of the particular types of dams to be constructed for this purpose is a matter to be determined by Congress or its authorized agents, in that Congress has no constitutional power to construct or to authorize an agency of the Federal Government to construct dams and reservoirs upon a navigable stream or upon its tributaries where the improvement of navigation and the promotion of interstate commerce is merely collateral or incidental to some other object outside the constitutional authority of Congress, or where some separate and distinct project not within the Federal power is inextricably intermingled with the improvement of navigation or interstate commerce, and any attempt so to do, on the part of Congress or on the part of any Federal agency, violates the powers reserved to the people and the States under the Ninth and Tenth Amendments, error being assigned separately to the making of each of said Conclusions.

110. In making its Conclusions of Law, Nos. 6, 7, 8, 9 and 11, in so far as said Conclusions, or any of them, hold that the Federal Government, under the powers delegated to it by the Federal Constitution, has the power to authorize the construction of any of the dams and reservoirs constructed, under construction or planned for construction by TVA for the control of floods on the Tennessee River

or the Mississippi River, in that the power of Congress under the Constitution in the matter of flood control is [fol. 944] limited to the protection of navigable channels and navigation on navigable streams, error being assigned separately to the making of each of said Conclusions.

111. In making its Conclusions of Law Nos. 14, 15, 16 and those parts of Conclusions of Law Nos. 17, 18 and 22 holding that the water power created as a result of the construction of the dams authorized by the TVA Act is the property of the United States and that Congress has the constitutional power to authorize and has authorized the installation and operation of power houses, generators and other ancillary facilities, in that the water power being produced and to be produced at said dams is not incidental to the improvement of the Tennessee River for navigation or to the exercise of any other constitutional power, error being assigned separately to the making of each of said Conclusions.

112. In making those parts of its Conclusions of Law Nos. 17 and 18 holding that electric energy generated at any of the dams authorized by the TVA Act may be disposed of by Congress or its authorized agency in any manner which the Congress, in the exercise of its discretion, may select as the reasonable means of such disposition, in that said electric energy will not be constitutionally produced and title thereto will not vest in the Federal Government, and in that Congress is without power to select a method for the disposition of said electric energy as government property, whether or not lawfully acquired or produced, which invades the reserved rights of the States or takes property without due process of law, in violation [fol. 945] of the Fifth, Ninth or Tenth Amendments of the United States Constitution, error being assigned separately to the making of each of said Conclusions.

113. In making its Conclusions of Law Nos. 19 and 20, holding that the TVA Act directs the TVA to operate all the dams constructed by it primarily in the interests of navigation and flood control, but expressly authorizes TVA to generate electric energy at said dams in so far as this can be done consistently with the interests of navigation and flood control and that the method of operation of the dams, constructed and under construction, followed and

proposed to be followed is authorized by the TVA Act, in that (a) the TVA Act requires TVA so to construct and operate its facilities as to produce the maximum amount of electric power which can be generated, and (b) said TVA Act is unconstitutional for the reasons stated in Assignment No. 106, error being assigned separately to the making of each of said Conclusions.

114. In Making its Conclusions of Law Nos. 21 to 29, inclusive, and 32, holding that under the power to dispose of property of the United States Congress has the constitutional power to authorize, and by the TVA Act has authorized, TVA to construct or acquire transmission lines leading from dams authorized by the TVA Act to municipalities, cooperatives, large industrial customers, other purchasers of power and the surrounding market area, to sell electric energy generated at any of the dams authorized by the TVA Act to wholesale customers under long term contract, or direct to rural customers, inhabitants of small towns and villages and industrial customers [fol. 946] and that Congress has authorized the TVA to own and operate transmission and rural distribution lines to transmit and sell electric energy generated at any of the dams constructed under the authority of the TVA Act, in that, among other things, (a) the Federal Government is without constitutional authority to engage in the purely proprietary, competitive business of transmitting, distributing and selling electricity, (b) the right to dispose of Government property, even where lawfully acquired, is limited by the powers and rights reserved to the States and the people by the Ninth and Tenth Amendments to the Federal Constitution, and (c) any use of the power to dispose of Government property for the purpose or with the direct effect of regulating intrastate electric rates, is unauthorized by the Federal Constitution and in violation of the Fifth, Ninth and Tenth Amendments, error being assigned separately to the making of each of said Conclusions.

115. In making its Conclusion of Law No. 30, holding that Congress has directed TVA by the TVA Act to give preference in the sale of power to States, counties, municipalities and cooperatives, the errors being those specified in Assignment No. 114, supra, and the further error that there is no constitutional authority for the Federal

Government in the disposition of its property, whether validly acquired or otherwise, to favor one group of citizens over any other group of citizens or to regulate the conduct of an intrastate business so that it shall be carried on by public or non-profit corporations or associations.

116. In making its Conclusion of Law No. 31, holding that the TVA Act validly authorizes TVA to construct rural transmission lines for service to farmers or cooperatives and to sell such lines to municipalities or such cooperatives, the errors being those specified in Assignments Nos. 114 and 115, *supra*, and the further error that there is no constitutional power in the Federal Government under the facts of this case to construct electric transmission facilities with the view to selling the same to municipalities or non-profit organizations.

117. In making its Conclusion of Law No. 33, holding that the TVA Act validly authorizes the Board of Directors of TVA to fix the rates at which electric energy generated at the TVA dams may be sold and validly vests discretion in such Board in fixing such rates and that the exercise of such discretion is not subject to judicial review, in that, among other things, (a) said Act, and particularly Sections 9a and 14 thereof, requires that electric energy produced by TVA shall be sold at rates which will make the TVA "power project self-supporting and self-liquidating"; (b) the Federal Government in any event has no constitutional authority to engage in the business of generating, distributing and selling electricity at rates arbitrarily fixed below cost with the purpose or effect of preferring any section of the nation over other sections of the country; (c) the Federal Government in any event has no constitutional authority to engage in the business of offering electricity for sale generally in the several states, or any one of them, at rates substantially lower than existing rates fixed by state regulatory bodies in said states or state or, as in the case of TVA, below the cost of production for the purpose or with the direct effect of regulating local electric rates, including those of complainants and so to do violates the Fifth, Ninth and Tenth Amendments; and (d) the scope of such discretion as resides in Congress in fixing the price at which government [fol. 948] property shall be sold and the scope of any stat-

utory discretion delegated to TVA by the TVA Act is, in any event and particularly under the circumstances of this case, subject to judicial review.

118. In making its Conclusions of Law Nos. 34 to 38, both inclusive, holding that under the power to dispose of property the Government may attach to the sale of its property such conditions as it may deem reasonable to insure the widespread diffusion of the benefits of such property and the avoidance of monopolistic control of such property and that Congress has constitutionally authorized the TVA to include in any contracts for the sale of power generated at any of the TVA dams provisions relating to the rates at which such power is to be resold to ultimate consumers and provisions relating to the book-keeping and accounting methods to be followed by the purchasers of such power, in that such provisions and regulations, among other things, are unauthorized by any power granted to the Federal Government under the Constitution of the United States and violate the Fifth, Ninth and Tenth Amendments thereto, error being assigned separately to the making of each of said Conclusions.

119. In making its Conclusions of Law Nos. 39 and 40, holding that the TVA Act does not contain any provisions regulating or attempting to regulate the rates or operations of the complainants or other private utilities, and that sale of power by TVA in accordance with the provisions of the statute at rates fixed and determined by the Board of Directors does not constitute regulation of the rates or businesses of the complainant companies or other private utilities, in that (a) the statutory purpose to regulate local electric rates of existing utilities in the TVA area, including complainants, appears on the face of the statute, and (b) the facts in the record establish that the acts and threatened acts of the defendants will regulate the rates and businesses of the existing utilities, including complainants, all in violation of the Fifth, Ninth and Tenth Amendments to the Federal Constitution, error being assigned separately to the making of each of said Conclusions.

[fol. 949] 120. In making its Conclusions of Law Nos. 42 and 43 holding that the municipalities and cooperatives pur-

chasing power at wholesale from TVA are validly authorized under the statutes of the several states in which they are located, to purchase said power, to contract with TVA with respect to said power, to engage in the business of selling such power at retail, to enter into contracts with TVA containing provisions agreeing upon resale rates of such power and provisions relating to bookkeeping and accounting methods to be followed by such purchasers and that such provisions do not constitute any unlawful delegation or abdication of sovereign power by the municipalities or cooperatives, in that (a) a State, acting either directly or through any agency created by the State, may not validly surrender its police powers to an agency of the Federal Government or by statute, contract or other State action extend the constitutional powers of the Federal Government; and (b) some of the States in which complainants do business and into which TVA threatens immediately to extend its power business do not have statutes of the character described by the Court, error being assigned separately to the making of each of said Conclusions.

121. In making its Conclusions of Law Nos. 41 and 46, holding that the municipalities and cooperatives purchasing power at wholesale from TVA are subject to regulation by the states and that under the laws of the several states in which the municipalities and cooperatives purchasing power at wholesale from TVA are located, the rates at which the power purchased from TVA may be resold by the municipalities and cooperatives remain subject to the police power of the states, if and when the states may elect to [fol. 950] exercise such power, in that, among other things, (a) a State, acting directly or through any agency created by the State, may not surrender its police powers to the Federal Government or, by statute, contract, or any other means, extend the constitutional powers of the Federal Government temporarily, for a period of years, or permanently; (b) TVA, if a valid and existing Federal Agency, is not subject to State police power or State regulation; and (c) in any event, under the facts of this case the states are precluded by economic compulsion from recapturing such state police or other reserve powers now being exercised by TVA, error being assigned separately to the making of each of said Conclusions.

122. In making its Conclusions of Law Nos. 47 and 48, holding that cooperatives and municipalities purchasing power at wholesale from TVA are, under the laws of the several states in which they are located, independent corporate entities or public agencies and not subsidiaries or instrumentalities of TVA, in that, under the facts of this case, said municipalities and cooperatives are mere agencies or instrumentalities of TVA for the distribution of TVA power, error being assigned separately to the making of each of said Conclusions.

123. In making its Conclusion of Law No. 44, holding that the provisions of the contracts between TVA and the municipalities and cooperatives purchasing power at wholesale from it relating to the methods of keeping accounts and the rates at which the power so purchased from TVA is to be resold do not constitute any invasion of the reserved powers of the States under the Tenth Amendment to the Constitution of the United States.

[fol. 951] 124. In making its Conclusion of Law No. 45, holding that the provisions in the contracts between TVA and the municipalities and cooperatives purchasing power at wholesale from it relating to the rates at which such power is to be resold do not in law amount to regulation either of the rates of said wholesale purchasers or of the rates of private companies competing with such wholesale purchasers, in that on the face of the TVA Act and under the facts of this case, the regulation of resale rates of municipalities and cooperatives purchasing power at wholesale from TVA is an integral part of a statutory and administrative scheme for regulating the rates and service of existing utilities, including complainants, in the TVA area.

125. In making its Conclusions of Law Nos. 49 and 51, holding that the municipalities and cooperatives purchasing power at wholesale from TVA are authorized under the laws of the several states in which they are located to engage in the business of selling and distributing electric energy at retail and have the legal right to compete with the complainants in such business, and that any damage or injury resulting or threatened to the complainants, or any of them, from such competition does not result in any legal injury to, or invade any legal right of, any of complainants

and does not give rise to a cause of action on behalf of complainants, in that (a) the injury to the complainants is the direct result of the unlawful action of the defendants in inducing by subsidies or in otherwise promoting the acquisition and operation of electric distribution facilities on the part of municipalities or cooperatives as a means of acquiring a market or acquiring control of the electric power [fol. 952] business; and (b) the control of resale rates by TVA is part of the statutory and administrative scheme to regulate all local electric rates, including those of complainants, error being assigned separately to the making of each of said Conclusions.

126. In making its Conclusion of Law No. 50, to the extent that said Conclusion holds that none of the complainants have any exclusive franchise in any of the various municipalities and communities in which they operate, in that said Conclusion to that extent is not supported by and is in direct conflict with Findings of Fact adopted by the Court, [complainants' proposed Finding No. VI-28, (No. 28 in the order of February 23, 1938), and defendants' proposed Finding No. 50, (omitted entirely from the order of February 23, 1938)].

127. In making its Conclusion of Law No. 52 in so far as said Conclusion holds that under the facts of this case complainant companies have no standing or right to challenge the right of the municipalities and cooperatives to sell and distribute electric energy produced by TVA in competition with said companies.

128. In making its Conclusions of Law Nos. 53 and 54, holding that the complainants have no standing or right to challenge the legal right of TVA to sell or to challenge the validity of the contracts under which TVA is selling or has agreed to sell electric energy at wholesale to municipalities and cooperatives engaged in the business of reselling said energy at retail in competition with complainants, error being assigned separately to the making of each of said Conclusions.

[fol. 953] 129. In making its Conclusions of Law Nos. 55 and 56, holding that complainants have failed to prove any damage in fact, actual or threatened, resulting from sales of power by TVA directly to rural or industrial customers not previously served by any of the complainants, in that said

purported Conclusion is a finding of fact not supported by the evidence and contrary to the clear weight of the evidence, and further holding that complainants have no standing or right to challenge the legal right of TVA to make sales directly to rural or industrial customers not previously served by any of the complainants, in that such sales are an invasion of valuable property rights of complainants in the normal growth and expansion of their businesses and constitute an integral part of the statutory and administrative scheme to regulate the rates of complainants, error being assigned separately to the making of each of said Conclusions.

130. In making its Conclusion of Law No. 57, holding that the complainants have no legal right to be free from competition and have no legal standing or right to challenge the statutory powers of TVA to generate, transmit or sell electric energy in competition with them, or some of them, in that (a) each of complainants has a legal right to be free from the competition of any person, corporation or agency which does not hold a franchise or has not complied with all of the laws of the states regulating the carrying on of such business; (b) TVA has not complied with the laws of the several states regulating the right to engage in the business of generating, transmitting and distributing electricity; and (c) TVA has no right to engage in said business [fol. 954] for the reasons specified in Assignments Nos. 114, 115 and 116.

131. In making its Conclusion of Law No. 58, holding that under the decision of the Supreme Court in the Ashwander case, the right of TVA to acquire and operate the facilities in Alabama transferred to it under the contract of January 4 is settled and cannot be questioned in this case, in that said facilities and their operation have now been incorporated as an integral part of a scheme for the development of a vast federal electric utility and for the regulation of rates and services of existing utilities, including complainants, all of which is unauthorized by any power granted to the Federal Government under the Federal Constitution and is in contravention of the Fifth, Ninth and Tenth Amendments thereto.

132. In making its Conclusion of Law No. 59, holding that Section 7 of the contract of January 4 confers upon TVA

the contractual right to serve municipalities located within the ceded area in Alabama, and that the Alabama Power Company, a party to that contract, has no standing to question the right of TVA to engage in such service, in that (a) Section 7 of said contract in this respect merely provides that the power companies, including Alabama Power Company, will not during the period of the contract sell electric energy to customers not then served by the Alabama Power Company directly or indirectly during the period of the contract; (b) said contract of January 4 has long since expired; and (c) neither the State of Alabama nor [fol. 955] the Alabama Power Company has any power to cede any part of the State of Alabama to the Federal Government or any agency thereof for any purpose.

133. In making its Conclusions of Law Nos. 60 and 61, holding that Section 7 of the contract of January 4 confers upon TVA the right to sell power to any municipality owning and operating its own distribution system and not purchasing power from utilities party to that contract, and to any other customers not served by the parties to that contract as of January 4, 1934, up to a maximum aggregate demand of 2500 kw., and that complainants Alabama Power Company, Mississippi Power Company and The Tennessee Electric Power Company, as parties to said contract, have no right to challenge sales of power by TVA to such municipalities or customers pursuant to the rights so conferred, in that (a) said Section 7 provided in this respect only that during the contract period nothing contained in said contract should be construed to prevent TVA from selling electric energy outside of the designated counties to municipalities not then being served directly or indirectly by the power companies or to customers not then served by the power companies outside of the counties named in the contract up to a total demand of 2500 kw.; (b) said contract of January 4, 1934, has long since expired; and (c) none of the States of Mississippi, Alabama, or Tennessee, or of the power companies named, has any power to authorize, by contract or otherwise, the TVA to engage in the business of distributing electric power in any of said States, error being assigned separately to the making of each of said Conclusions.

[fol. 956] 134. In making its Conclusion of Law, not designated by number in the order of January 24, 1938,

(No. 62 in the order of February 23, 1938), in so far as it holds that under the record the complainants have no legal right within the areas served by them respectively to exclude competition by TVA, the distribution of TVA power, the taking of potential customers, or interference with the normal growth and expansion of the businesses of said complainants.

135. In entering its final Decree, dated January 25, 1938, dismissing the Bill of Complaint and denying all of the prayers for relief contained therein, in that the evidence as a whole failed to support the Findings of Fact made and entered by the Court, the Conclusions of Law drawn therefrom and the Decree based thereon.

Wherefore, complainants pray that the said Decree, entered January 25, 1938, be reversed and for such other and further relief as to the Court may seem just and proper.

Charles C. Trabue, Trabue, Hume & Armistead,
Charles M. Seymour, Frantz, McConnell & Seymour,
Raymond T. Jackson, Baker, Hostetler,
Sidlo & Patterson, Counsel for Complainants.

Dated February 24, 1938.

[fol. 957] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER ALLOWING APPEAL—Filed February 24, 1938

The complainants in the above entitled cause, and each of them, having prayed for the allowance of an appeal in this cause to the Supreme Court of the United States from the final decree made and entered in the above entitled cause by the District Court of the United States for the Eastern District of Tennessee, Northern Division, on the 25th day of January, 1938, and from each and every part thereof, and having presented their petition for appeal, assignment of errors, prayer for reversal and statement as to jurisdiction pursuant to the statutes and the rules of the Supreme Court of the United States in such case made and provided;

It is now here ordered that an appeal be, and the same is hereby allowed to the Supreme Court of the United States from the District Court of the United States for the Eastern District of Tennessee, Northern Division, in this cause, as provided by law, and it is further ordered that the clerk of the said District Court shall prepare and certify a transcript of the record, proceedings, and judgment in this cause and transmit the same to the Supreme Court of the United States, so that he shall have the same in said court within sixty (60) days of this date.

And it is further ordered that security for costs on appeal be fixed in the sum of \$500.00.

Florence E. Allen, U. S. Circuit Judge.

Dated Feb. 24th, 1938.

[fols. 958-960] Bond on appeal for \$500.00, approved and filed February 24, 1938, omitted in printing.

[fol. 961] Citation, in usual form, showing service on Wm. C. Fitts and James L. Fly, filed February 24, 1938, omitted in printing.

[fol. 962] IN UNITED STATES DISTRICT COURT

(Caption omitted)

COMPLAINANTS' EXCEPTION TO ORDER ON FINDINGS OF FACT
AND CONCLUSIONS OF LAW—Filed March 3, 1938

Come the complainants and except to the Court's order of February 23, 1938, for the following reasons, among others, viz:

- (1) Refusing to adopt complainants' draft of findings of fact and conclusions of law in accordance with the Court's order of January 24, 1938, which was prepared and submitted pursuant to the Court's suggestion to counsel.
- (2) Adopting the draft of findings of fact and conclusions of law submitted by defendants, revising, rearranging, and renumbering the findings of fact adopted by the Court

in its order of January 24, 1938, and inserting therein argumentative headings requested by the defendants.

(3) Ordering that the findings of fact and conclusions of law, which were filed February 23, 1938, the day before the time for applying for an appeal expired, be entered as of January 24, 1938.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles M. Seymour, Solicitors for Complainants.

[fol. 963] IN UNITED STATES DISTRICT COURT

(Caption omitted)

ORDER FOR TRANSMISSION OF ORIGINAL EXHIBITS—Filed April 4, 1938

The written motion of the Appellants for the transmission of certain original exhibits by the Clerk of the United States District Court for the Northern Division of the Eastern District of Tennessee to the Supreme Court of the United States having come on to be heard,

It is Ordered and Decreed by the Court that the Clerk of this Court, upon request to do so in the Praeceptum, may and he hereby is directed to remove from the records and files of this Court and transmit as original to the Supreme Court of the United States in connection with the Appeal heretofore taken, the following maps, charts, documents, etc.:

1. Complainants' Exhibit Nos. 7, 12, 27, 29, 33, 37, 41, 45, 49, 54, 74, 82, 89, 98, 101, 105, 105c, 105d, 106-109 inclusive, 112-116, inclusive, 182, 183, 184, 187, 188, 189, 190, 199, 205-210 inclusive, 266, 320, 321, 326-330 inclusive, 332, 332a, 333a, 334, 335a, 336, 342-346 inclusive, 350, 351, 352, 354, 357, 358, 359, 361, 362, 364, 365, 366, 372, 409-411 inclusive, 485, 487-496 inclusive, 503, 904, 905, 907, 909, 912-915 inclusive 925, 933, 936 and 942.

2. Defendants' Exhibit Nos. 31, 32, 36, 37, 38, 40, 44, 49, 50, 55-64 inclusive, 66, 72-81 inclusive, 83, 86, 87, 89-93 inclusive, 95-101 inclusive, 104, 109, 110, 113, 116, 118-125

inclusive, 130, 132, 136a, 136b, 137, 138, 153, 154, and Exhibit "K" to Defendants' Answer.

Approved for entry.

(S.) Florence E. Allen, U. S. Circuit Judge. —
—, U. S. District Judge. — —, U. S. District Judge.

O. K. James Lawrence Fly, Solicitor for Appellees.

O. K. Charles D. Snepp, Sol. for Appellants.

[fol. 964] IN UNITED STATES DISTRICT COURT

(Caption omitted)

NOTICE OF LODGMENT OF STATEMENT OF EVIDENCE—Filed
April 7, 1938

Notice is hereby given that Complainants and Appellants have prepared and have this day lodged with the Clerk of the United States District Court for the Eastern District of Tennessee, Northern Division, in accordance with Equity Rule 75, a statement of all the evidence taken and given on the trial of the above cause and that on April 18, 1938, at 10:00 o'clock, A. M., in the Federal Building at Knoxville, Tennessee, or at such other time and place as may be fixed by the Court, Complainants and Appellants will ask the Court to approve and allow the statement of evidence so prepared and lodged.

Baker, Hostetler, Sidlo & Patterson, Trabue, Hume & Armistead, Frantz, McConnell & Seymour, by Charles D. Snepp, Solicitors for Complainants and Appellants.

Service of the foregoing Notice this 7th day of April, 1938, is hereby admitted and acknowledged.

James Lawrence Fly, Solicitor for Defendants and Appellees.

[fol. 1] IN UNITED STATES DISTRICT COURT FOR THE EASTERN
DISTRICT OF TENNESSEE, NORTHERN DIVISION

In Equity. No. 228

THE TENNESSEE ELECTRIC POWER COMPANY, a Maryland Corporation; Franklin Power & Light Company, a Tennessee Corporation; Memphis Power & Light Company, a New Jersey Corporation; Southern Tennessee Power Company, a Delaware Corporation; Birmingham Electric Company, an Alabama Corporation; Mississippi Power Company, a Maine Corporation; Appalachian Electric Power Company, a Virginia Corporation; Carolina Power & Light Company, a North Carolina Corporation; Tennessee Public Service Company, a Maine Corporation; Holston River Electric Company, a Tennessee Corporation; Alabama Power Company, an Alabama Corporation; Kentucky & West Virginia Power Company, Inc., a Kentucky Corporation; Kingsport Utilities, Incorporated, a Virginia Corporation; Kentucky-Tennessee Light & Power Co., a Kentucky Corporation; West Tennessee Power & Light Company, a Florida Corporation; Mississippi Power and Light Company, a Florida Corporation; East Tennessee Light & Power Company, a Virginia Corporation; Tennessee Eastern Electric Company, a Massachusetts Corporation, Complainants,

v.

TENNESSEE VALLEY AUTHORITY, a Body Corporate, Created by an Act of Congress Approved May 18, 1933; Arthur E. Morgan, Individually and as an Executive Officer and Director of Tennessee Valley Authority; Harcourt A. Morgan, Individually and as an Executive Officer and Director of Tennessee Valley Authority; and David E. Lilienthal, Individually and as an Executive Officer and Director of Tennessee Valley Authority, Defendants.

Statement of Evidence under Equity Rule No. 75

[fol. 2] Now come the complainants in the above entitled cause and, pursuant to Equity Rule No. 75, as last amended, present to the Court this narrative statement of the evidence taken on the trial of said cause.

APPEARANCES

The following appearances were entered: Messrs. Newton D. Baker, Raymond T. Jackson, W. H. Bemis, S. D. L. Jackson, Jr., Chas. M. Seymour, Chas. D. Snepp, Chas. C. Trabue, Warren Daane, Lawrence N. Spears, and Walter Bouldin, as Counsel for Complainants; Messrs. James L. Fly, John Lord O'Brian, William C. Fitts, H. H. Fowler, and Herbert Marks, as Counsel for Defendants.

The Court announced that it had considered the petition for rehearing the motion to take the deposition of Secretary Ickes and had decided to adhere to the decision made by the Court on September 27, 1937, denying complainants' motion to take such deposition. The Court stated further that if, during the course of the case, a new state of facts should develop, permission would be given complainants to renew their original motion. An exception was noted by complainants and granted.

The Court then took under advisement motions made by the defendants to dismiss, such motions having been overruled by the District Court and such decisions having been affirmed by the Circuit Court of Appeals.

Evidence for the Complainants

At the conclusion of the opening statements of counsel, the complainants made application for the issuance of a subpoena duces tecum, addressed to the defendant TVA, to furnish the documents listed therein. Counsel advised the Court that defendants had agreed to furnish copies of all contracts described in paragraph 2 of the subpoena and [fol. 3] the maps of transmission and distribution lines and substations described in paragraphs 8 and 9 of the subpoena, and that therefore such items need not be considered. Thereupon the Court stated, with reference to the remaining items of the subpoena, that it wished to be informed as to the materiality and relevancy of every such item.

"Judge Allen: I wish to call your attention to the statute. I assume that this subpoena is being asked for under Section 647:

'When any party applies'—I shall leave out certain parts of the statute—'applies to any Judge of the United States

Court for a subpoena demanding the witness to appear and testify and to bring with him and to produce any paper or writing or written statement or book, or other document supposed to be in the possession or power of such witness and to be described in the subpoena—'. Now, undoubtedly this subpoena described the various papers—'such Judge, on being satisfied by the affidavit of the person applying or otherwise, that there is reason to believe that such paper, writing, and so forth, is in the possession and power of the witness and that the same if produced would be competent and material evidence for the party applying therefor, may order the subpoena issued.'

We think that we are following the precise terms of the statute in asking for a definite statement as to the materiality and competency and relevancy of each item which you ask to be produced."

The Court then heard argument of counsel directed to complainants' right to require the production of TVA corporate minutes described in paragraph 1 of the subpoena during the course of which counsel for defendants stated:

"Now, we are perfectly willing, and here is where we draw the line, we are perfectly willing to deliver to the complainants every Board resolution that they can call for that authorizes any action on behalf of the Authority.

We say that we have the right to draw the line between resolutions of the Board authorizing corporate actions and resolutions that merely contain references, discussions, arguments, policies and plans. Now, that is our position on the first item involving the resolutions of the Board."

[fol. 4] RULING RE ALLOWANCE OF SUBPÆNA DUCES TECUM

Following the argument of counsel the Court ruled:

"Judge Allen: The Court has considered the question of the allowance of the subpoena duces tecum, so far as argued this morning.

With respect to the items prayed to be produced under paragraph 1 of the application for subpoena duces tecum, it appears that the Congress has limited the power of the Court to issue subpoenas duces tecum to cases in which the evidence sought is competent and material.

The attorneys for the Tennessee Valley Authority have offered to produce copies of all contracts made by the Authority, and of all resolutions enacted by the Authority.

Since the application for subpoena duces tecum is not verified by affidavit as required by Title 28, Section 647, U. S. C., and since the competency and relevancy of the minutes described in paragraph 1 is not otherwise shown, and since counsel for the complainants state that the minutes relate to the pronouncements, policies and program of the Tennessee Valley Authority and its directors, the application for subpoena duces tecum to produce the minutes described in paragraph 1 of the application is denied.

Later some of these minutes may be required, but for the present no evidence of their materiality is produced."

Counsel for complainants excepted to the Court's ruling and to preserve their exception the subpoena theretofore presented to the Court was marked for identification Complainants' Exhibit 1.

"Mr. Fly: May I add, your Honor, that it will be our attitude to enable complainants to get any and everything that pertains to the concrete facts which we feel are within any bounds of reason, at issue here, and we will be glad to confer with them to that end.

Mr. R. T. Jackson: We will of course be glad to confer with counsel for defendants. We, of course, will not be willing to substitute their judgment for the judgment of the Court as to what is competent and relevant.

Mr. S. D. L. Jackson: Do I understand counsel for defendants have offered in addition to the contracts certain resolutions?

Judge Allen: That was the understanding of the entire Court.

[fol. 4a] Mr. Fly: We are willing to give them the resolutions authorizing these contracts, and any other pertinent transactions of a concrete character. I cannot state with any degree of precision now, but I don't think there will be any difficulty on that.

Judge Allen: It was the understanding of the Court that he offered, had offered to tender the resolutions enacted by the Authority. Was that not correct?

Mr. Fly: No, your Honor. We do not endeavor to turn over to them all of the resolutions on any and every sub-

ject, but as to any transaction which could properly be brought in issue here, yes, without limitation as to those resolutions. We can give you all of the resolutions authorizing the contracts, transmission lines, sales and construction contracts and everything of that type.

Judge Allen: The Court would like to have a statement with reference to the relevancy and competency of all the other documents and papers which are prayed to be produced in the other paragraphs of the application for subpoena duces tecum. The Court will not consider the other paragraphs of the application until the memorandum has been received from counsel for the complainants."

(A verified statement as requested by the Court was thereafter submitted to the Court and appears of record as Complainants' Exhibit 111. Also to meet one of the requirements stated by the Court in its ruling covering paragraph 1 of the subpoena counsel for complainants subsequently submitted a verified statement respecting the material called for in said paragraph, which verified statement appears of record as Complainants' Exhibit 110.)

Counsel for complainants offered in evidence and the Court received as Complainants' Exhibit 2, a stipulation that the respective complainant companies are incorporated as public utility companies and authorized to do business as such in the respective state or states in which they operate; and as Complainants' Exhibit 3, a stipulation relating to the franchises owned and held by the several complainant companies.

[fol. 4b] B. F. MANNING was called as a witness on behalf of the complainants and, having been first duly sworn, was examined and testified as follows:

Direct examination:

I am 52 years old, reside in Chattanooga, Tennessee, and am Secretary-Treasurer of The Tennessee Electric Power Company. As Secretary of that Company, I have custody and possession of its records, including the franchises of the Company. The Company is now operating in the counties and municipalities in Tennessee and Georgia in which it owns county and municipal franchises as set forth in Complainants' Exhibit 3. All of the franchises obtained since

the organization of the Tennessee Railroad and Public Utilities Commission in 1919 have been approved by that Commission, with the exception of Lynnville, the assignment of which was approved upon its acquisition by The Tennessee Electric Power Company.

The memorandum (offered and received in evidence as Complainants' Exhibit 4) is a list identifying the franchises in question by the name of the county and municipality, and the year or date when such franchises were approved by the Commission.

Some of the franchises held by the Company were originally issued to individuals or corporations other than the Company and title to such franchises was acquired by the Company by assignment. The memorandum (offered and received in evidence as Complainants' Exhibit 5) is a list which shows in the case of each franchise what assignment was made, the name of the transferor, the date of assignment, in the case of county franchises the date of the approval of the Railroad and Public Utilities Commission, and in the case of municipal franchises the date of the [fol. 4c] approval both of the Commission and of the municipality in question.

Exhibit B to Complainants' Exhibit 3 sets forth the names of certain municipalities wherein The Tennessee Electric Power Company does not claim to hold any existing unexpired franchises. The list shows in the case of Mount Pleasant, Tennessee, that the franchise expired on July 18, 1936, and in the case of Spring City, Tennessee, that the franchise expired May 4, 1937. All of the other towns listed are incorporated, except Friendsville, Jacksboro, and Ravenscroft. Jasper and Center, although incorporated, have never operated as incorporated cities or elected any officials. With the exception of Mount Pleasant and Spring City, The Tennessee Electric Power Company was, in fact, operating a distribution system in all of these municipalities prior to the incorporation of the respective municipalities, if incorporation has occurred.

The memorandum (offered and received in evidence as Complainants' Exhibit 6) is a statement of taxes paid by The Tennessee Electric Power Company for the years 1932 to 1936, inclusive, and estimated for the year 1937.

(The witness was excused.)